BURMA GAZETTEER

SHWEBO DISTRICT

VOLUME A

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COMPILED BY

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SETTLEMENT OFFICER

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PREFACE.

THANKS are due to the officials of the district and others who have provided material for incorporation in the Gazetteer, in particular to Mr. C. E. Milner, Deputy Conservator of Forests, who furnished the notes on forests and fauna.

The Gazetteer has been compiled mainly by Mr. D. B. Petch, I.C.S., Assistant Settlement Officer, some of the material having been collected earlier by Mr. H. Parker, I.C.S., Assistant Settlement Officer.

A. WILLIAMSON,
Settlement Officer, Shwebo.

1st March 1924.

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SHWEBO DISTRICT.

VOLUME A.

CHAPTER I.

PHYSICAL DESCRIPTION.

Shwebo is one of the seven districts of the North-West Border Division in Upper Burma. It was constituted in its present form in 1895 by the amalgamation of the old Shwebo and Ye-u districts. It is 5,714 square miles in extent and lies between 22° 10′ and 23° 52′ North and 94° 47′ and 96° 1′ East. **Situation and area.**

On the north it marches with Katha District; on the east with Katha district (Mogôk Subdivision) and Mandalay District; on the south with Sagaing and Lower Chindwin Districts and on the west with the Upper Chindwin District. No official notification of the boundaries of the District has been traced, but they may be described as follows:— **Boundari**

North.—Starting from a point on the Mu-Chindwin divide, about the latitude of 23° 50′, the boundary follows the Nanbayan *chaung* south-eastwards till it falls into the Mu river, and continues southwards along the Mu to the mouth of the Swèlè *chaung*. After ascending the Swèlè eastwards for five miles the boundary turns away to the north-east across country till it meets the Thaw *chaung*, and thence ascends the Thaw *chaung* to its junction with the Daungyu *chaung*, from which point it follows the Daungyu to Wagyidaw village, a mile east of the Mu Valley railway line. Thence the boundary turns almost due south till it again meets the Thaw *chaung* near Mongaung village, where it turns eastwards again up that *chaung* to Yawgôn hamlet and finally ascends a small spur of the Minwun range of hills to the crest of the Mu-Irrawaddy divide.

East.—Turning south, the watershed is followed till it ends at the mouth of the Zin *chaung* on the right or west bank of the Irrawaddy, whence the river becomes the boundary as far as Singaing hamlet five miles south of Sheinmaga, at latitude 22° 12′.

South.—The boundary goes westwards from Singaing in an irregular line till it reaches the Mu at Letpanhla village, whence it ascends the Mu until near Myinthe village. Thence crossing the Mu a complicated line is followed to the low range of hills midway between Mônywa and the Mu, where the boundary after making a sharp salient into the Budalin township of the Lower Chindwin District turns northwards and follows a cart track as far as Saingbyin, where it again resumes its westwards course, reaching a point little more than a mile from the Chindwin River at the Zingale *chaung*.

West.—From this point to the starting point at the head of the Nanbayan *chaung* the boundary is the Mu-Chindwin divide.

sical ct.

The district is roughly rectangular in shape (about a hundred miles from north to south and sixty miles from east to west) and, with the exception of a strip a few miles in width along the Irrawaddy, and a small area in the south-west that drains into the Chindwin, lies wholly within the basin of the Mu River. On the eastern and western limits of the district there are two parallel ridges separating the Mu drainage from the drainage of the Irrawaddy and the Chindwin, but the whole of the central basin is a level plain devoid of any striking physical feature and devoted almost entirely to paddy cultivation. It is only in the south-east and south-west corners of the district adjoining Sagaing and Lower Chindwin districts and on the Irrawaddy-Mu watershed that one finds that rolling upland country devoted to dry crops, that is typical of the dry zone.

There are two clearly marked systems both running north and south along the eastern and western limits of the district respectively. In the north adjoining Katha District both these systems reach a height of 2,000 feet and over. Farther south they are much less imposing and degenerate into low watersheds separating the Mu basin from the Irrawaddy and the Chindwin. The eastern ridge skirting the right bank of the Irrawaddy continues into Sagaing District and is known as the Minwun-taung in both districts. The highest point in the eastern system is Zintaung (2290) in the Gonga Reserve on the Shwebo-Katha District border. Hngetpyit-taung (1838) at the south of the Sadwingyi Reserve is the highest point on a short ridge parallel to the main system. In the western system the highest point is 2384 in the Nangyitha Reserve. At the southern end Okpodaung (897) on the Lower Chindwin border stands out prominently. In the north both systems are covered with

heavy teak bearing forest. Further south, however, the lower rainfall is reflected in the character of the forest growth. South of Kôngyi the eastern ridge is covered with thin scrub jungle where it has not yielded to cultivation, while the western system carries only *indaing* species of poor quality.

Rivers a streams The Irra waddy.

The Irrawaddy forms the eastern boundary of the district for some 72 miles. Throughout its course in this district it flows through a comparatively narrow gorge. Its waters are not used for irrigation and the silt deposited on a narrow belt of *kaing* land is coarser and less fertile than that left behind in other districts farther south, where the banks are lower and the velocity of the silt bearing water less.

The Mu

Rising in Katha District and joining the Irrawaddy near Myinmu in Sagaing District the Mu flows from north to south through the heart of Shwebo District. Before the erection of the canal headworks it was navigable by boats of light draught during the rains, and it is still used for floating timber. Its chief importance now is as the source of water supply for the Shwebo and Ye-u canals, which take off from a common weir at Kabo about half way down its course and irrigate wide tracts of country to the east and west of the river. The Mu is a perennial river but from December to June it dwindles down to a shallow stream fordable everywhere, and in most years even during the monsoon the flow of water is erratic.

Tributari of the Mu

All other important streams in the district are either tributaries of the Mu or streams in the Mu basin which peter out before reaching the river. On the right bank beginning from the north are the Nanbayan, the Nangyitha, the Pyaungthwe, with its feeders the Maingwun and Ponhmwa, and the Yabin all of which are important for timber extraction. The waters of the Pyaungthwe and Yabin are also utilised for irrigation by means of sand weirs. The next stream the Paungkadaung has cut too deep a channel to be used for irrigation. All these streams carry only a trickle of water in the dry season. The remaining streams having their sources in the high *indaing* country in the west of the district all disappear in the central paddy plain before reaching the Mu, and their shallow sandy beds are dry for the greater part of the year. After heavy rain they run in spate, and efforts are made to utilise their waters for irrigation by means of sand weirs. They are all very unstable. When in flood they carry large quantities of sand and silt in suspension which is deposited whenever the velocity of the water is checked. The result is that they are constantly changing their course, eating into paddy

fields in one place and heaping up silt and sand in another. The largest and most violent is the Sipadon which in its lower course, where it debouches on the Nwabetkyi plain, has shifted its bed across some five miles of country from north to south. The Shwegu, Sawmè and Ponbaw farther south are similar in type but somewhat less violent. The Payanpaga *chaung*, which flows diagonally across the Ye-u canal area from north-west to south-east, has cut a deeper channel and is more stable as it flows through *tanè* soil. This stream picks up the drainage water from paddy land lying to the west of the Ye-u Canal area and also acts as the chief drainage channel for the canal area itself. It flows into the Mu close to the Lower Chindwin border.

On the left bank of the Mu there are few tributaries of any economic importance. The Tamyit, the Teinyin and the Indaw or (Hngetpyittaung) may be mentioned. The last stream has in the past been used for irrigation, but its sandy bed and violent flooding are obstacles to any permanent irrigation project. It cuts through the old Burmese work the Muhaung canal and enters the Mu River just north of Kabo. It was the difficulty anticipated in crossing this stream that was the chief reason for not taking off the present Shwebo Canal at a point farther north than Kabo. South of the Indaw *chaung* the streams from the east are caught up by the Muhaung canal and utilised to irrigate the strip of land lying between it and the Shwebo canal. Of these streams the most important is the Kobin *chaung* which flows into the Mahananda tank north of Shwebo town.

Though there are numerous tanks large and small throughout the district, there are few sheets of water that are not of artificial formation. Even the Halin *jheel* which is in the main a natural lake has a bund at the southern end to enable it to store up larger supplies of water. The lake is fed by small streams draining the country to the north-east, by drainage water carried by the old Mu canal which tails into the north end of the lake and by water released from paddy fields irrigated by the Môksogyôn branch of the Shwebo Canal. It is about six miles long and three miles broad in the widest part and is nowhere very deep even in the rains. During the dry weather only a small area in the centre is covered with water, Almost the whole bed of the lake has been occupied for *mayin* cultivation, but ordinarily only a small proportion of the area is actually cultivated. The lake has a reputation for its wild-fowl shooting and in most years geese, duck, teal and snipe are abundant from November to February.

On both banks of the Mu river in its lower course there are numerous narrow depressions that fill with flood water during the rains. These are old channels of the Mu and are known locally as ***mudeins***. They are occasionally sources of water-supply for ***mayin*** cultivation.

Irrigation will be dealt with in Chapter IV, but the **Canals.** network of canals and distributaries, which covers nearly the whole of the central *tanè* basin, may be mentioned here as an important feature of the landscape in an arid country. In addition to irrigating the main paddy crop during the monsoon the canals have proved a great blessing to the inhabitants by assuring an ample supply of drinking water for man and beast in the dry season in an area where water is seldom found below the surface at depths to which villagers can sink wells.

The greater portion of Shwebo district is covered by **Geology** alluvium, but to the west and east of the district hilly country occurs, the rocks of which are in the main of tertiary age. Probably the rocks of the south-eastern part of the district belong mainly to the Irrawaddy sand-stone series (see Geol. Mag., LIX, page 492)—a formation of upper tertiary age, containing silicified fossil wood and vertebrate remains. Older tertiary rocks, probably Eocene, are found in Kyunhla Township, and in the east of the district north of Thabeikkyin. These rocks, which are described by T. Oldham as mainly sandstones, conglomerates and clunchy shales, contain coal seams near Kabwet, and petroleum in the Kyunhla township. If the petroleum, as seems possible, is of the same age as that of the hills west of Kani in Lower Chindwin, it must be of upper Eocene age. Similarly the coal measures of Kabwet are possibly to be regarded as uppermost Eocene (Yaw stage).

Although the geology of Shwebo has not yet been worked out, it seems probable that there is here an Eocene group of beds consisting of sandstones, conglomerates and shales, and containing coal and oil, and an upper tertiary group of sandstones and conglomerates of fresh water facies resting upon them. Dykes of greenstone are intruded into the tertiary sandstones in the east of Shwebo, and are exposed on the banks of the Irrawaddy. The greenstone is said by T. Oldham to be highly vesicular, almost as much so as pumice. The best exposure is near Kabwet on the Irrawaddy to the north-east of Shwebo. From this point the dykes extend inland in a northerly direction. In the east of the district, the tertiary rocks rest unconformably upon gneisses, crystalline limestones, and granites

(Mogôk Gneiss series) of Archaean age. These gneissic rocks are exposed near Sheinmaga, in the Nattaung hills north of Thitseingyi, and to the south of Malè. T. Oldham describes the Archaeans south of Sheinmaga (near Tatywa) as hornblende gneiss with veins of hornblendic granite traversing the gneiss in an east-westerly direction. To the south of Malè, hornblendic gneisses occur, in which are bands of saccharoid crystalline limestone similar to that of the famous Sagyin quarries north of Mandalay. The bands of limestone have an E.N.E.—W.S.W. strike.

Excepting these few exposures of Archaeans close to the banks of the Irrawaddy, the whole of the district appears to be covered by tertiary beds or by recent alluvium.

The soils of the district are dealt with in Chapter IV.

and ature. With the exception of a comparatively unimportant area in the north of the district, which is on the border of the northern wet zone, the climate of the district is that of the dry zone. There are three clearly marked seasons. The cold weather begins in November and lasts until the middle of February. The hot season extends from the middle of March to the end of May. The rains usually bring relief in June. From June to October, though there are only seven or eight rainy days a month, the sky is often overcast, and a southerly breeze makes the climate not unpleasant. There are however periods during September and the early days of October when the climate is muggy and oppressive.

Meteorological observations are not officially recorded at Shwebo, but the following table shows the average range of temperature at the Civil Hospital, Shwebo, during the years 1919 to 1923 for the months of December, April and August:—

	December.	April.	August.
Average maximum	75°	96°	87°
Average minimum	61°	77°	77°

The highest shade temperature recorded in the Hospital in April and May is 102 , but a shade temperature of 106° is not unknown elsewhere in Shwebo town.

The climate though hot is generally healthy except in the region of higher rainfall in the north-west of the district where it is very malarious.

The mean annual rainfall recorded for the twenty years 1903-1922 at the ten recording stations in the district is 37·75 inches. There is however a fifty per cent. difference between Kyunhla (48·52 inches) and Wetlet (32·60 inches). The records indicate a steady increase in rainfall from south to north that is reflected in the character of the vegetation. Thus, taking the stations in order from south to north, the average rainfall east of the Mu is Wetlet 32·60 inches, Shwebo 36·23 inches, Kin-u 36·09 inches, Kabo 38·99 inches and Kanbalu 39·42 inches; west of the Mu the figures are Tabayin 34·09 inches, Ye-u 35·71 inches, Tamadaw 35·98, Tazè 39·51 and Kyunhla 48·52 inches. Except in the extreme north of the district, where Kyunhla in the west (48·52 inches) has a considerably higher rainfall than Kanbalu in the east (39·42 inches) there is no noticeable difference in the average rainfall from east to west, though there are important variations from year to year. September is everywhere the month of highest rainfall. June provides the next highest, while July and August are usually characterised by long breaks. The October rains are usually adequate for paddy cultivation though sometimes excessive for sesamum and cotton. The light rains of November are important for bean crops. Heavy hailstorms have been known to occur in this month and do great damage to standing crops. Rainfall

The highest mean rainfall recorded during the last twenty years was in 1910 when the district average was 49·77 inches. The lowest mean rainfall was 26·78 inches in 1920. In the former year the non-matured area was the lowest recorded since the introduction of Land Records. In the latter it was the highest since the introduction of irrigation. In abnormal years such as these the statistics of total rainfall are directly reflected in the statistics of cultivation. In more normal years however the distribution of the rainfall is as important a factor as its total amount. A season characterised by very heavy falls followed by long breaks may be less favourable than one in which the rainfall though lighter is better distributed.

The district containing as it does nearly a thousand square miles of reserved forests and twice that area of jungle, is naturally still rich in game. The Maingwun ridge on the east and the Mu-Chindwin watershed on the west give ample cover to *saing*, bison, and elephant. The increase in cultivation due to irrigation has however greatly reduced the numbers of *thamin* which living in scrub jungle in and round cultivation are ruthlessly slaughtered for their heads in the hot weather and for their flesh in the close season. Fauna.

phant. There are three main elephant areas :—

(i) The Baw tract in the extreme north-east where considerable herds wander between this district, the Thaw and Budaung Reserves in Katha, and the *kaing* swamp along the Mèza and Irrawaddy near Tigyaing. In the autumn these herds raid down as far as Pazigale and Kôngyi doing considerable damage to crops.

(ii) The Hnaw forest in the south-west where herds from the Chindwin come over in the rains to raid the paddy fields in the west of Tabayin and Ye-u Townships. In 1920 three were shot near the Mu within 14 miles of Shwebo.

(iii) The large reserves in the Kyunhla Township and extensive *kaing* areas along the Mu notably near Panmaye.

A considerable number of good tuskers have been shot in the district since 1912, and at the present time the herds seem mostly to be led by old females or *haings*. In 1921 and 1922 two keddah licensees have been working the district without much success, one man capturing nothing and the other having 13 deaths out of 24 captures.

no. Rumour has it that an occasional rhino comes over from the Chindwin into the north-west of Kyunhla Township.

on. Bison are found in all suitable localities in the higher and denser jungle but cannot be said to be common.

ng. Considerable numbers of *saing* occur in all the big reserves and may even be seen within a few miles of Shwebo, but their chief habitat is the more inaccessible *indaing* hills. Rinderpest attacked these herds badly in 1914-15.

er and ther. Tiger and panther occur all over the district in moderate numbers, and thrilling tales are told of the Kyaukmyaung and Kabwet roads, the most startling being that of a Subdivisional Officer whose pony trap was chased along the former road by two tigers alternately springing at and missing the pony . . . Panther indeed would seem judging by the list of annual rewards to breed profusely near Kyaikthin, one sportsman having claimed 80 rewards in a season and an *ex*-police constable having to the writer's knowledge caught seven in one trap in a period of two months.

r. The tracks of bear may be seen in most jungle streams, but he is a shy animal and is only rarely bagged in the rains by village *shikaris*.

. The sambhur and barking deer are numerous in all suitable localities, and hog deer occur in places along the Mu-

Panmaye, Mugan and Tazè. *Thamin* as already noted used to be very common all over the southern half of the district but are rapidly being exterminated.

Serow. This interesting goat antelope occurs on one or two isolated hill tops a definition of the position of which would possibly lead to their extermination.

Wild D This pest is far too numerous especially in Kanbalu and Kyunhla Townships where they occasionally kill village cattle and ponies, Sabènatha (1910), near Kyaikthin (1922), Pinde (1922). Local legend has it that wild dogs live in large packs of a hundred or so ruled by a black king dog and that the usual pack of ten or fifteen is only an outlying skirmishing party. In the more distant jungle it is no unusual thing to find the remains of a full grown *saing* killed by wild dogs.

Birds. The district produces some of the finest duck and jungle-fowl shooting in Burma, Wetlet Jheel being a famous centre for duck and geese where individual bags of 50 duck and 14 geese have been made in an afternoon. An Xmas party in 1919 obtained 19 different species, 1 goose, 2 snipe and 19 kinds of duck and teal including the rare bronze-capped teal, red-crested pochard, white-eyed and common pochard. The commonest duck are however gadwall. The Chinese francolin, black breasted quail and brown button quail occur everywhere, while kholy pheasant and the skulking hill partridge may be found in the hills. Snipe both pintail and fantail may be obtained round the jheels from September onwards, and an occasional woodcock is shot in the Baw tract. The non-game birds are typical of the dry zone, shrikes, cuckoos and others.

Snakes. Of poisonous snakes the Russell's viper, cobra and krait are most common. The Russell's viper is particularly dreaded during harvesting operations. Of non-poisonous snakes the rat-snake is most common.

CHAPTER II.

HISTORY AND ARCHAEOLOGY.

Part I.—History.

Early History. The modern history of Shwebo begins with the rise of Alaungpaya, the founder of the last Burmese dynasty, which ruled for nearly a century and a half, from 1753 to 1885. Before this period Shwebo was called Môksobo and was a small village in the charge of a subordinate official. References in the Burmese Chronicle to the village and its

neighbourhood in early times are few and slight, and these, with a few inscriptions and local histories, give but a bare indication of the trend of events through the centuries. Before the tenth century all is in the realm of legend. The country appears to have been divided among numerous petty chiefs. Little is known of the people who inhabited it, and even their race is obscure.

The village of Malè on the Irrawaddy figures in the early migration stories of the *Hmannan Yazawin*. It is related that one of the monarchs of the old Burmese Kingdom of Tagaung, centuries before the Christian era, was driven from his kingdom by a Chinese invasion and settled at Malè. Five centuries later during the life time of Gautama, Daza Raza who later founded old Pagan, near Tagaung, and finally rebuilt Tagaung itself, fled from Kapilavastu in Northern India and settled at Malè. Malè is also the centre of a strange legend concerning the birth of Pyusawti who became King of Pagan about the second century A.D. Myedu, a village of importance for many centuries, is supposed to have been founded by an Indian Prince before the time of Gautama, and Halingyi, twelve miles south of Shwebo, has a wild legend which boasts a line of 800 kings, the first of whom, King Karabaw, a son of the fabulous Mahasamata, founded the kingdom many thousands of years before the Christian era, in the most delectable spot he could conceive. The place unfortunately lacked water, and this difficulty he sought to overcome by the bunding of the Irrawaddy below Kyaukmyaung but was prevented by the hostility of the *nats*.

More than ordinary interest attaches to this village of Halingyi, which is believed to have been a city of importance among the Pyu peoples. The Pyus were a strong race known to the Chinese up to the 13th century as P' aio. They occupied the west bank of the Irrawaddy from Prome as far north as this district, and also inhabited the Chindwin valley. Inscriptions in Pyu script found at Halingyi and at Prome have been assigned, on palæographical grounds, to the fourth or fifth centuries A. D.

The Pyu Min Pyon Min legend which is strongly implanted at Halingyi is one of the few surviving traces of Pyu ascendancy. The legend is also told in connection with the ancient Powindaung caves in the Lower Chindwin and pervades many other sites up the Chindwin. The Halingyi legend contains the name Pyusawti, the name of the above mentioned King of Pagan who was born of an egg which floated down from Malè. It seems possible, though this is mere conjecture, that Pyusawti was King of Halingyi before

he overcame the enemies surrounding Pagan and ascended its throne in the 2nd century A.D. The striking similarity between the nomenclature of the Kings of Pagan from Pyu-sawti onwards and the rulers of Yunnan at the time is considered to indicate a common origin probably communality of race. It is probable that for some time before the welding together of the tribes into a great Kingdom by Anawrata in the 11th century, the inhabitants of Upper Burma were half Pyu and half Shan and were all, at least nominally, subject to Nancha'o (Yunnan).

The following outline of the history of the district is derived for the most part from the Burmese Chronicle known as the *Hmannan Yazawin-daw-gyi* and the *Kônbaung Set Maha Yazawin-daw-gyi*. Many of the dates given in the earlier periods are approximate only. Some have been taken from Phayre, whose dates have in many cases been found to conflict with those in the Chronicle.

11th, 12th and 13th centuries A.D. The Anawrata dynasty.

In the Myedu *Yazawin* is mentioned the expulsion of the Shans early in the 11th century by Anawrata, and the prevalence of traditions concerning later kings of the Anawrata dynasty indicates that the district was part of the Pagan kingdom from this time onwards until overrun by the Shans in 1298. The names of Kyansittha (1057-1085) Alaung Sithu (1085-1160) and Narapati Sithu (1167-1204), which appear frequently in local histories and in connection with the founding of pagodas, are well known to the people. The legends that have widest currency are those which relate the work of Alaung Sithu or Narapati Sithu, during his tours of Upper Burma on his magic raft (*Thinkanet-Paung Set-kya*). The Burmese Chronicle notes the confusion between these two names, and it is doubtful to which of the two the numerous works in Shwebo may rightly be ascribed. The King is variously known in villages throughout the district, as Alaung Sithu, Narapati Sithu, Namani Sithu, Yamani Sithu, Sithu Min or Nayawadi Sithu. He is said to have visited Myedu, where he stayed on the hill known as the Myinkwadaung and founded many pagodas including the Shwekugyi, a pagoda famous for its large image of Buddha. While on this hill, he had the old Mu Canal started at its foot and dug as far as Môksobo. When it was completed, he floated down to Shwebo on a gilded raft. At Shwebo he erected the Shwetaza Pagoda and granted a piece of land to a hunter named Nga Po on condition that he populated it and looked after the pagoda. The village founded by Nga Po was called Môkso-Nga-Po-ywa, Hunter Nga Po's village, shortened in time to Môksobo by which name the village was known up to Alaungpaya's

accession to the throne and the building of the walled city. To the same king is ascribed the founding of Tabayin at a place where he found a goat drinking water in the jungle, the name Tabayin being a corruption of the name "Dipeshin," *di* meaning "water," *pe* "a goat" and *shin* "jungle" (It is suggested that the language is Chin). In this area a long narrow sandy ridge, probably the silted up bed of a small stream, is pointed out as the track left by the King's magic raft, and almost every village, pagoda and tank in its vicinity is ascribed to him. The track is known as the Paung-Yo-dan. It passes north from Mèthè to Inbin and thence west of Tindeinyan to Hnawgôn. About four miles south of Myedu an old irrigation bund runs east and west on either side of the Mu River. This is known as the Alaung Sithu Kanyo. The building of the Kadu Tank is also ascribed to the same King. On his return to his capital he made "nine images of the Lord out of the *Saga*-leaf prow of the *Thinkanet* boat; and in order that the religion might last five thousand years and all creatures be profited he built *gus* for these nine images one each at Myedu, Sipottaya, ... and Mòksobo; there they practised piety". No doubt a large number of the traditions current at the present time have been manufactured out of a false etymology, but there is usually some foundation for strong traditions, and some of them may well be genuine. All the religious buildings of Pagan were erected between 1057 and 1227, and it is not improbable that the district was the scene of similar activity, though on a less magnificent scale, as tradition claims.

The 11th and 12th centuries were thus in all probability periods of peace and prosperity, but the power of the Anawrata dynasty eventually declined, and the Mogaung annals claim for Sam Long Hpa, the Mogaung Sawbwa (1215-1228), the government of the province of Mòksobo, early in the 13th century.* This document may not be reliable, but, Shan influence had undoubtedly been growing in the Burmese kingdom, and, when the Burmese forces suffered a defeat in 1284 east of Malè before the Mongol army of Kublai Khan, and the King, thereafter known as Taròkpye Min, was driven to Bassein, the kingdom was partitioned among petty Shan chiefs.

3 A. D.
A. D.
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For the next two and a half centuries the district was under the rule of the Shan chiefs reigning first at Myinzaing and Panya (south of Ava) and later at Sagaing and Ava, and its history is that of the incessant wars between these chiefs and the chiefs of the Shan principalities of Mohnyin and Mogaung in the north, the district between the Mu and

* Upper Burma Gazetteer, Part II.

Irrawaddy rivers, which covered the capitals, being jealously guarded.

The Myedu Yazawin claims that the boundaries of the province of Myedu were in the west the Chindwin, in the east the Irrawaddy and in the north the Shan principality of Mogaung. The whereabouts of the southern boundary Kyauktaga, is unknown. Myedu was governed by *Myosas* appointed by the Shan Chiefs.

Thihathu, the youngest of the three Shan brothers who dethroned and subsequently murdered Kyawswa the last of the Pagan Kings of the Anawrata dynasty, eventually attained sole power and established a palace at Panya, north of Myinzaing. During his reign his son Usana, the Einshe Min, was sent to repair the fortress of Myedu. Thihathu had another son Athinkaya who became Governor of Sagaing where he raised large bodies of armed men.* Among his forces were included 24 horsemen under *Myothugyi*, Nga Yan Naing, a villager of Tazè, as Myingaung.† Athinkaya declared himself independent of Panya at Sagaing in 1315.

For 49 years the district remained under the successors of Athinkaya ruling at Sagaing contemporaneously with the kings of Panya, until, in 1364, the Mogaung Sawbwa descended on Tagaung where the reigning king's son Thadominbya was governor, and followed up his success thereby taking Sagaing and Panya. Thadominbya, himself a Shan, succeeded in recovering the kingdom from the northern Shans and founded the new city of Ava. His successor Mingyiswa-sawkè had Myedu repaired and made Thetshekyawdin and Thinkatha *Myosas* of Myedu and Tabayin.* The Mohnyin *sa* raided Myedu about 1372. About 1384 Razadirit ascended the throne of Pegu and Mingyiswa-sawkè, who had enlarged his kingdom and already taken Prome, was incited to invade Pegu. From this invasion dates the great war which raged intermittently between Burmans and Talaings for 200 years and ended in the victory of Alaungpaya. The reign of Mingaung I, who succeeded Mingyiswa-sawkè's son, was marked by exhausting engagements with Razadirit, who seriously threatened the kingdom and at one time penetrated as far north as Tagaung. But throughout the fighting he was distracted by disturbances and rebellions among the Northern Shans and had to keep garrisons in the district at Tabayin, Myedu, Sitha, Sibôktaya and Ngayanè. He founded the cities of Mahabo and Myohla and strengthened them into fortresses, the walls of which are still standing though the sites are

* Hmannan Yazawin. † Myedu Yazawin

deserted. The Mingaung Myaung canal leading from Myohla to Palaing tank was also constructed in his reign.

In 1413 the Shan Chiefs of Mawkè and Mawdôn attacked Myedu, and the Einshe Min was sent against them.* The two chiefs fled to China, and the Chinese were induced to interfere on their behalf to recover their wives and children who had been taken prisoners. Mingaung died in 1421, and, in 1426, the Mohnyin Sawbwa usurped the throne and made his younger son *Myosa* of Myedu.*† His successors fought continually with the Northern Shans, Mogaung in particular. Further appointments of *Myosas* are related in the Burmese Chronicle and the attack and destruction of Myedu and Ngayanè in 1482 is described The Myedu *sa* about this time declared himself independent, thus bringing unfriendly territory nearer to the gates of Ava than the dynasty had yet known.

In 1502 Thetdawshe, the new *Myos* of Myedu reported that Salun the Mohnyin Chief was making continued preparations to attack Myedu and Ngayanè. In the same year Myedu was attacked, and Thetdawshe retired to Tabayin. For the next twenty years there was desultory fighting in the district, and in spite of pressing need in the south of his kingdom, where revolutions had to be suppressed, the King was unable to weaken his garrisons in Tabayin, Sibôktaya and Sitha.* Four years after taking Myedu, Salun, the Mohnyin Chief, attacked the Tabayin garrison and was bought off by the cession of Myedu and Ngayanè. In 1511 the King, Narapati, invested Myedu but was beaten off by Shan allies of Salun. Some years later a further encounter with Salun occurred in which the Burmese were victorious in driving back the Shans and regaining all the ground lost. In spite of repairs and reinforcements, however, in 1523 Salun took Myedu, Ngayanè and Sibôktaya in succession, and followed to Inbè and Thayaing, taking large numbers of prisoners and cattle and forcing the garrison at Tabayin, which he had avoided, to retire. Salun spent the rains in Myedu and marching on Sagaing next year, burnt everything in the vicinity and plundered farther south. He returned north again, but, two years later, again attacked Sagaing from Halin and Hmetti and taking Ava, placed his son Thohanbwa on the throne and withdrew.*

At this period, the beginning of the 16th century, the country was divided among the kingdoms of Pegu, which had been independent since the fall of the Anawrata dynasty, Toungoo, Prome, Burma, governed by the Shan Thohanbwa, and numerous Shan principalities.

* Hmannan Yazawin. † Myedu Yazawin.

During the next twenty years after 1523 the fragment of Burma in the hands of the Shan Chiefs changed hands every few years. Thohanbwa was hated by both Burmans and Shans and was murdered. Many of the Burmans had taken refuge in Toungoo which now became more Burmese than Burma and whose king was looked upon as the hope of the Burmese race. Soon after 1540 Tabin Shweti of Toungoo captured Pegu and Pagan and marched on Ava, but found the Shan confederacy of the north too strong to be attacked. On his death his general Bayin Naung, though at first forced to retire to Toungoo, again took Pegu and Pagan, and, in 1554, succeeded in taking Ava and Sagaing, then separate principalities. When the Shans became aware that he intended to attack them, they assembled in force at Thawutti, on the Mu river north of Ye-u. There they were defeated by Bayin Naung, who marched up from Sagaing with his centre on the line Saye, Myingane, Inbè and Halin. The Shans retired to Myedu leaving the Wuntho *Myosa* as a rear guard at Tazè. The *Myosas* of both Sibòktaya and Tabayin capitulated, and, in a further attack, the Shans were driven out of the district, back to the hills, and Bayin Naung was King of all Burma.

The absence of all mention of the district in the Burmese Chronicle through the next 150 years of the 16th and 17th centuries would indicate peace, though according to the Mohnyin Chronicle, Sz I, the Mohnyin Chief in the year 1585 "defeated the Burmese at Mithu (Myedu), killing the chief To-naung and, in 1590, the Burmese took revenge for the Mithu affair.* " Also, in 1599, during the reign of his successor, Bayin Naung's great kingdom collapsed. Mogaung and Mohnyin again became independent and something like chaos reigned in the south. Nyaungyan Min, who was tributary King at Ava at the time, refrained from interfering in the affairs of the lower country, and determined first to establish his own authority in Burma proper. He ineffectually attacked Mogaung and Mohnyin who had refused to pay tribute, but succeeded in annexing the Indaing Tract of the present Kyunhla Township which, according to the Indaing Sittan, was paying revenue in gold to Mogaung. This tract had been occupied by Shans who are said to have come over from the Mahamyaing country on the Upper Chindwin border. He also removed the prisoners taken in the Shan states, during his father Bayin Naung's battles, from the village near Ava, where they had first been quartered, and settled them in Nyaungbin, Ywatha, Hngetpyaw, Nagasin and Pintha, the five towns making up the governorship in the present Kanbalu Township known up to the time of the

1557 A.D end of th 17th cent A.D. S tlement prisoners

* Myedu Yazawin.

annexation as Pyinsala-nga-myo. Maha Dhamma Raza (1605—1628) Nyaungyan Min's successor, who completed the conquest of the Shans, and in the south eventually recovered the kingdom of Bayin Naung including Pegu, also made many settlements in the district. While fighting in the south, he attacked De Brito the Portuguese governor of Syriam in 1613. Most of the leading Portuguese were executed, but the remainder and many of mixed race were sent as prisoners to Ava and afterwards settled in the northern districts. These formed the nucleus of the Christian villages of Chantha, Mônhla and Chaungyo in this District. During Maha Dhamma Raza's reign also, *Pathis*, or Mahomedans, came over, " voluntarily, " according to their Sittans, from Sandoway and Arakan, and were allotted lands in Myedu, Sitha, Sibôktaya and Tabayin in this district. Quite probably they were in actual fact prisoners of war. It was they who formed the nucleus of the *Pathi* population of the district which is still strong in numbers at Myedu, Chinbyitkyin, Wetto and Ngayanè. In the same reign Talaing captives from Toungoo were settled at Kyaukaing and Yathi in the present Kanbalu Township, where they were given lands on condition of working iron for the King.

Prisoners taken between 1625 and 1636, mostly during the reign of Thalunmintaya-gyi, in Kyaingyon or Keng Hung on the Mekong River and in the Yun country, Siam, were settled on fertile alluvial land on the banks of the Mu River at Thapanseik, Tôktalôk, Letsaunggan, Lèywa, Thetpe, Mutha, Sinin, Wunsi, Yudawmu and Shwèbangôn and also at Nwabetgyi, Myedu, Thityabin and Payan. These Kaunghans and Yuns, as they were called, were required to render service to the King as lictors, and did so up to the time of the annexation. The majority of their settlements still exist.

Manipuri Incursions. Before the close of the 17th century, the power of Ava began to weaken. Symptoms of its decline are apparent in successful raids directed from Manipur. The Manipuris occupied the Kubo valley in the north-west without any effort being made to oust them.

Thirty years later they defeated on the Manipur frontier a Burmese army which included men from this district in the *Myauk-bet-myin* cavalry and the Tabayin and Myedu Regiments. In 1735 they actually attacked Myedu and carried off the " Kalas (Mahomedans) and Burmans " living there. Two years later the King becoming aware of this activity, sent out two small forces to reconnoitre—one under the Pontaga *Sa*. These were both defeated near the Chindwin, and the King immediately sent a force, stated to have consisted of 200 elephants, 700 horses and 5,000 men to

occupy Kunôn and Modaung about 10 miles west of Ye-u. They were attacked there by the Manipuris and, partly owing to one of their generals being inebriated, were driven back. The Manipuris then destroyed all the *kyaungs*, tanks and pagodas from Kunôn as far south as Tabayin and retired. This was in January 1738. The following cold weather the generals sent out against this enemy were beaten outside the district and driven back on Tabayin, where they collected their scattered forces and spent the rains of 1739. In December 1739 the Manipuris descended in force and cleverly avoiding Tabayin and Myedu, which had in the meantime been filled with troops, who were apparently content to remain passively on the defensive within the walls, marched down through Sitha, Môksobo and Halin, and engaged the force hastily raised from Sagaing and the surrounding neighbourhood to defend the passage to that town between the Kaunghmudaw pagoda and the Minwun range of hills. This body they defeated, and, setting fire to Sagaing, retired, probably because they were unable to cross the great river; but in Burmese history it is stated that they had come "to fulfil a prophesy of their great Brahman that if their chief bathed in the Irrawaddy at Sagaing, all evil would cease in their country." Their object was apparently plunder and not permanent conquest.

Fall of A[va] March 1[752].

Pegu had been under the Burmese Kings for the last hundred years, but the confusion caused by these raids prompted the governor to declare himself King in 1740. He was unpopular and was murdered, but the same year an insurrection began among the Shan colony, known as the Gwe Shans, at Madaya, and was supported by the Talaings. The power of Pegu increased and mixed bodies of Talaings and Gwe Shans made incursions which for the most part the Burmese were unable to resist. They penetrated beyond Ava and at one time, marching west to raid Myedu from Malè, collided with a body of Manipuris at whose hands they suffered a severe defeat. About a year later, in 1751, a grand invasion of Ava was planned, and an army, nominally commanded by the Uperraja but whose real leader was Talaban, marched up the line of the Irrawaddy, and, joined by the Talaings and Gwes from the old established settlement Madaya-Ôkpo, attacked Ava. Ava fell in March 1752. The King was taken captive to Hanthawaddy, and parties were sent out to all the towns and villages of the north to receive their allegiance.

Resistanc[e] of Môks[obo] (Shwebo)

The power of Ava had long been declining, and no where was the Talaing victory disputed except at the small village of Môksobo. There, as village headman over "300 families,

inhabiting a little spot where his capital now stands" lived a man afterwards to be known to history as Alaungpaya (Alompra) King of Burma and known to the Burmese as U Aungzeya. This man, although only a common cultivator, was undoubtedly a man of character. A discussion concerning the names, U Aungzeya and Alaungpaya, will be found in the appendix to J. Stuart's *Burma through the Centuries.* Burmans believe that the name U Aungzeya was given him at birth but auspicious names given at birth are seldom so amply justified by after events. It was probably assumed later. As regards the title Alaungpaya, it may mean embryo Buddha, though Payalaung would be expected. *Alaung* also means corpse. It is possible that the name Alaungpaya or Alaungmintayagyi was first applied after his death when his body was being taken back to the capital. U Aungzeya was not a "Hunter captain." Môksobo was the name by which Shwebo was known many centuries before he was born.

When the Talaing Officer with 100 men came to Môksobo to administer the oath of allegiance "they were told by the *Seggee* (*Thugyi*) that he was not prepared for the performance of that ceremony after a manner that he could wish to honour those with, who were to administer it; and therefore begged that they would please to make their tour to the neighbouring villages first, and by their return he would make provision for the performance of it, suitable to the occasion; the Pegu Officer went his rounds accordingly and returning to Monchabue was kindly received by his host who was to be sworn next day." The Burmese Chronicle says that a deputation from the Gwe Shans at Madaya-Ôkpo arrived on the same day on a similar errand. The Chronicle contrasts U Aungzeya's treatment of the two parties. He would not give his allegiance to either, but when the Talaing party arrived at Halingyi on their return journey, unescorted, they were suddenly set upon and annihilated. The Gwe Shans, on the other hand, because the late King of Ava's son was in their hands were graciously escorted to Kyaukmyaung. News of this treatment reached the Uperraja, and he sent a party of about a thousand men to compel U Aungzeya to give his oath. But U Aungzeya had been making preparations. He had surrounded his village, the area where the Shwechettho pagoda, the *Pitaka-taik* and the S.P.G. Mission now stand, with a palm tree stockade of 400 *tas.* The forty-six *gaungs* of the villages round Môksobo had unanimously elected him their leader, and they and their followers had been collected within. When the Talaings

drew near, bodies of mounted men with dahs and spears were hidden in the jungle on either side of the Kyaukmyaung road, and five hundred men with sharpened staves waited in the stockade. Still dissembling his purpose U Aungzeya had a large *mandat* erected to welcome the Talaing Officer and a small party was sent out to meet them and give every show of submission. The Uperraja had already been led to understand that the former party had been set upon by bad characters. The Talaings were deceived until they saw the horsemen surrounding them. Taken by surpise they were easily overcome. The soldiers in the stockade rushed out and the rout was complete. Hundreds were killed and wounded and the rest fled.

The rainy season having now begun, U Aungzeya was troubled no more that year. All the other headmen, *myosas* and officials including those of Kin-u and Nga-so-sin (Kyunhla Township) in the north and Kyaukka, Thazi, Amyin and Padon (Alon), on the Chindwin side, had already given way, and to reduce Môksobo seemed to the Uperraja a matter of little difficulty. He therefore charged Talaban, his general, with this duty and departed with the majority of his troops to Hanthawaddy.

About this time a *tabaung* or prophesy was spread abroad, ဗိုသုံးဗို တဗိုနေလိုထွန်း တော့ "Of three '*bos*' one '*bo*' will shine like the sun." Many persons who had the necessary qualification had hopes of acquiring the throne, but of these only the Gwe-Gonne-ein, the Gwe Shan of Madaya-Ôkpo, and Nga Chit Nyo, the Kinu-*sa*, born at Nagabo seriously opposed U Aungzeya of Môksobo. There was also a *sagalein* current at the time namely "*pa-taw-seik*" which U Aungzeya pressed into his service when he made his first move against a third rival, his neighour, the *Peik-taw-sa*. (Note the transposition of vowels).

At the commencement of the dry season the Kin-u-*sa* joined actively with the Talaings who sent up an overwhelming force, including in its ranks Burmans pressed into their service, and surrounded the stockade on all sides. U Aungzeya had prepared for a siege by destroying all the wells in the neighbourhood and collecting supplies. His men had been reorganized and placed under his 68 *Myin-yi-tet*, (his 68 braves) whom he dignified with elaborate titles and later made his *wuns* and ministers. These are now locally famous as the *Chauk-kyaik-shit*. The Talaings attacked repeatedly but only once succeeded in penetrating the defences, and those that entered were at once set upon and killed. An attempt to set fire to the stockade was frustrated by an officer who crept out and lighted the straw

Siege of Môksob[...] end of 1[...]

before the carts, on which it was heaped, reached the walls. On the third day a concerted sally made from all four sides succeeded in driving off the Talaings. They fled in the greatest disorder, scattered like "sessamum sown broadcast", leaving arms and men, dead and wounded, strewn along the road to Sagaing, and losing many who tried to swim the Irrawaddy when the few boats were filled.

Talaban had seen that the resistance of Môksobo must be taken seriously, and he now realised that if U Aungzeya succeeded in gathering the neigbouring villages and provinces to his standard the situation would worsen. He therefore sent up a force to secure the aid of Tabayin, Amyin, Kawlin and Wuntho, and, with the Kin-u-*sa's* following, to confine U Aungzeya's men in Môksobo. This force, however, U Aungzeya defeated at Myaingwun (now a deserted village near Shwebo), and it may be noted that after both this battle and the previous one he diplomatically spared the lives of the Shans and Burmans pressed into the Talaing service.

nters he Kin- Nga Nyo.

U Aungzeya now tried to persuade the Kin-u-*sa* to join him against the common enemy, but, whether fearful of his life or respecting his oath of allegiance or still hoping to become king himself, the latter refused. U Aungzeya therefore prepared a force which was to march up and destroy Kin-u as soon as an advance party had set fire to it. But this enterprise failed rather ignominiously through the party setting fire to a few old *zayats* outside the town, instead of the town itself. U Aungzeya on receiving news of the fire had set out with minstrels playing to witness the defeat of his rival, but, north of Sitha, he met his men retreating. The honours again fell to the Kin-u-*sa* in his next encounter with U Aungzeya's army. He had been raiding cattle from the neighbourhood of Môksobo, and U Aungzeya had sent up a party of men under Môksogyon *Bo* to round them up and drive them back. Nga Chit Nyo the Kin-u-*sa* caught them up as they returned, and his brother, who was riding eagerly ahead, was killed and beheaded by one of U Aungzeya's men. Instead of attacking Nga Chit Nyo called upon them to halt, and issued a challenge to any one of their generals to single combat. The scene that follows is reminiscent of a Burmese boxing match. Refusing in return to meet the Môksogyon, Yinmagan and Yinba *Bos*, whom he declared unworthy of him, he eventualy accepted *Thenat Wun*, U Gaung, who with U Aungzeya's two grown up sons had led the rush from the stockade which raised the Talaing siege. Now the Kin-u-*sa* was a

Lu-sun-gaung (လုစွန်းကောင်း) a man of great skill, and when he spurred his horse to its wildest limit and circled round and round, now standing on one leg and now lying on his back, now with his legs crossed and now clinging to his horse's side, the *Thenat Wun* could only sit timidly astride his horse, clutching, and pointing at him, his large spear. This scene was abruptly terminated by the Kin-u-*sa* flinging his spear so that it stuck in the *Thenat Wun's* saddle and galloping off with a jeer at the troops who rose to his aid contrary to their promise.

Victories over the Talaing and local rivals.

Defeats of small garrisons by U Aungzeya at Ywathitgyi (west of the Mu) and on the Chindwin led the Talaing *Ngwe-kun-wun*, who had superseded Talaban, as general of the Talaing army, to organize a combined attack from all sides. Men were sent up to Kyaukmyaung, others up the Mu, a few to the north to steady and support the Kin-u-*sa* and a main body up the usual route from Sagaing. But U Aungzeya defeated the Mu army in a skirmish at Nyaunghla (south of Ye-u), and the party going north to support the Kin-u-*sa* returning disheartened, the scheme failed

U Aungzeya seized this opportunity to attack Kin-u and at the second attempt succeeded in entering the town. The Kin-u-*sa* himself got away under cover of the mists of the early morning, but, though he gathered together the remnants of his following, he did not again cause U Aungzeya any inconvenience. U Aungzeya then marched up to Chaukywa, Nga-so sin (*Thissi Chaukywa* in the east of Tazè Township and the *Indaing* Tract of Kyunhla) and forced them to join him.

All Kyaukka, Thazi, Alôn, Amyin (on the Chindwin side) and Tabayin were induced to join a further force of Talaings which entrenched at Tèdaw on the right bank of the Mu, due west of Shwebo, in the following month of December 1752. But U Aungzeya despatched a flying column in their rear, and burnt Alôn, Ngabayin and other villages now in the Lower Chindwin District. The Burmese contingent deserted, and the Talaings in the garrison were easily overcome. The greater part of the country between the Chindwin and the Irrawaddy now joined him.

The Gwe Shans of Madaya had meanwhile led the Talaings into a trap by pretending to offer submission, and tried to play the same trick on U Aungzeya by sending a minister to offer allegiance. This was made U Aungzeya's excuse for disposing of his remaining rival. He sent forces against them and after one unsuccessful attempt, in which a Gwe Shan *Lu-sun-gaung*, though struck heavily

with a spear, was merely borne back several cubits by the force of the blow, remaining quite unhurt, drove the Gwe Gonne-ein to the hills.

About this time also, the Prince, son of the captive King of Ava who had taken shelter with U Aungzeya fled from Môksobo suspecting some treacherous design on his person.

e building of tan-einga iwebo). U Aungzeya with thorough confidence in the future, now laid out his native village (Môksobo) as the capital of the kingdom and dignified it with the name of Yatanatheinga, City of the Precious Priesthood. He surrounded it with a high mud and brick wall and a moat, built a palace, after the plan of the old Tagaung Kings, on the site where the Deputy Commisioner's office and the jail now stand, had the Mahananda Tank dug for a water supply, and, the Kônbaung Yazawin continues, at the same time built the Shwechettho pagoda on the spot where he had been born, built a *nat* palace, and established a *Baho* or drum on which the time was to be beaten. It is possible the two mile square outer walls were not built until later. Baker, it will be seen, states that the walls, three years later were 1000 paces in length and this is roughly the size of the inner walls. The countryside was at this time known as Kônbaung *pyi*, no doubt a reference to the Mu embankment built in ages past, and the town now became known as Kônbaung. It was also called Yangyiaung (victory over the enemy). The present name of Shwebo is probably a corruption of the original Môksobo (see Chapter XIV).

ungzeya rs Ava he end of U Aungzeya spent most of the year in re-organizing and training his army, and at the end of 1753 he was prepared to attack Ava. An army, under his second son, surrounded the town which was soon abandoned, and U Aungzeya proceeded through Thayaing and Samun to Sagaing and entered Ava in formal procession.

er battle Kyauk-ung, 1754. The Talaing King of Pegu had now lost all that he had gained in the campaign of 1751-52, but it was not until 1754 that any great effort was made to resist U Aungzeya's growing power. In May of that year a large army was sent up to retake Ava, and after defeating U Aungzeya's two sons, moved on and surrounded the town, a river force carrying on upstream, burning the villages on either bank. Thitseingyi and even Makauk, Mala, Singu and Kuledwin had been burnt by the advance boats of this force before U Aungzeya, with a fleet of 35 war boats, carrying 30 to 40 men each, met and defeated them in a great river battle just south of Kyaukmyaung. Pursuing them he came up with the main fleet at Theintaik Island, some little way

down stream, under Talaban, who, as his men were discouraged, thought fit to retire. A Burmese sally from Ava completed the rout, and the Talaing army retreated in haste to Prome and its commander to Pegu.

Captair Baker's account U Aung relieves Prome a end of 1

An account of the next twelve months is given by Captain George Baker who arrived at Môksobo in September 1755 having been sent by Mr. Brooke, Chief of the British Settlement at Negrais, with "orders for the concluding of a treaty of Friendship and Alliance between "the King of the Buraghmahns" and "our Honourable Masters." "In November 1754, on the Peguers (Talaings) having put the King of the Buraghmahns to death, the Buraghmahns in Prome massacred all the Pegu officers, soldiers and common people of that nation then and there as there was no Pegu garrison above that town, they despatched a messenger to Momchabue, to beg the Great Man (U Aungzeya) to come to their assistance; assuring him of their readiness to receive him as their sovereign, on which he made as speedy preparations as possible, and after having sent a body of troops under one of his principal officers, into the Siam dominions, to oppose the lineal heir to the crown, and Quois (Gwe Shans) both of which were now his enemies, he despatched for Prome; where he arrived very seasonably for the relief of that place, it being then closely besieged by the Peguers, which siege however he found means to raise, after having killed and taken many of their troops, and caused the rest to retire down, within two days journey of Syriam, at a place called Panlang or Sinyagong."

And re Dagor (Rang

"Being thus successful in the wars he began now to take a prince-like state on him, and to receive the compliments, and courtesies usually paid to sovereigns in this country (which before he absolutely refused, saying God would send the people a prince, he for his part was only as an introduction to a revolution) Having now made himself master of this important place, where he got many boats, and had abundance of people flock to him, he resolved to push his conquest, and accordingly attacked the Peguers again, at Panlang, which he carried by storm, and those escaped of that party retiring to Syriam; he followed them to Dagon, where he pitched his camp, and here (as there had many before) abundance of Buraghmahns which were hitherto with the Peguers, deserted them, and came to him; here he continued till some time in June 1755, when finding it necessary to find himself with more fighting boats, and to collect the people together, many of which yet lay about in by-places, where they and

their families, had hid hitherto during the troubles; he resolved to go in person, and give the necessary orders for it; and having appointed about 15,000 men to maintain the post at Dagon, set out accordingly; and as he passed by every place, gave orders for them respectively to call in the former inhabitants, and obliged them to build a number of fighting boats, in proportion to the number of the people; many of which I saw in my way down, and all of which will probably be ready by the time he returns to Dagon, which he proposed to do in November, with as he said, 1,000 boats and 1,000,000 men but by the best information I can get, his boats will not exceed 500, nor his troops, both by land and water, not above 30 or 40 thousand which perhaps with the army now at Dagon, may make the whole body about 50,000."

ription Aung-

"This is the rise of the present King of the Buraghmahns (for he is now generally allowed as such, all officers taking their oaths of allegiance to him, and none now durst put him in mind of his having said "God would appoint another King". He is about 45 years of age, about 5 feet 11 inches high, of a hale constitution, and sturdy, though clean make, and of a complexion, full as dark as the generality of Buraghmahns, his visage somewhat long, though not thin, not prominent, and coarse features, a little pitted with the small-pox, his aspect somewhat grave, when serious and when seated in his throne I thought he supported majesty with a tolerable grace; his temper (if I have made right inferences from my conversations with the people, for though he were a fiend from the lower regions, his subjects through fear, as a conqueror, would extol his virtues) is hasty; and disposition severe, or rather cruel; I don't remember to have heard any instance of his justice (though he himself administers it in almost every case) that deserves to be more remembered for its impartiality than severity, though the former never fails to meet with encomiums from them about him; for he always causes and often sees, all corporal or capital punishments to be executed to the utmost rigour of the sentence, which generally argues rather a barbarous than humane disposition.

"As to his courage, his actions have often proved undaunted, and resolute; which with that strictness of discipline he keeps in his army, has won him his crown; he has nine legitimate children by one wife, the three first, sons, the eldest married, and is about 22 years of age, the second about 19 and is married also; he has also abundant relations and dependents, which he generally employs in posts of trust, or consequence, and so many of the principal

men of the country have lent a hand to his cause, and are now become interested in it that if he happens to complete his conquest of the Peguers this season, as (putting by the assistance the French may render them) has certainly much probability in it, it will in all human appearance be more than the fugitive prince can do, to retrieve his rights until some unforeseen contingencies may come to pass, or the hearts of the people, which is often seen to change, shall happen to be united, in a disposition to favour his restoration."

Description of Môksobo in September 1755.

Captain Baker also describes Shwebo in a "Short account of the Buraghmah country."

"Momchabue is the place where the present prince resides; it is a walled town, built with brick and mud, about 12 feet thick, and 20 high, and as I compute, about 1,000 paces each side, being a regular square; and contains about 4,000 families. It is seated in an even country, about 12 miles from the water side, but a very sandy soil, though it abounds in many places with a sort of black earth, which when boiled and otherwise prepared, produces great quantities of salt, and out of the neighbouring parts is got, with but a reasonable degree of trouble, good saltpetre, of which too there might be great quantities had, if people were employed on it."

1756-57. Aungzeya master of Burma.

As Baker expected, U Aungzeya did succeed in conquering all Pegu, though it took him two seasons to do it instead of one. After his occupation of Dagon where he founded Rangoon he spent some months at Shwebo and set out early in 1756 to take Syriam. This town for want of provisions was obliged to surrender, and U Aungzeya "carried away into his Dominions all the foreigners found in the place." Many of these were French and Dutch Christians and there can be no doubt that they were sent to join the Portuguese Christians captured early in the 17th century and already settled in many villages in this district and in other parts of Upper Burma (*see* Chapter III).

By June 1757 he had taken Pegu "whence all the artificers of the City were sent to Môksobo," * and he was practically master of all Burma.

A petty village official, he had raised himself to the throne of his country and established a dynasty which reigned up to the time of the British annexation. "He found his country conquered and oppressed by a foreigner; and he left it extending from Manipur in the north-west to Mergui in the south-east. Nor was his time wholly occupied with conquests; he prohibited gambling and the sale of

* The pottery workers of Shwedaik a mile south of Kyaukmyaung are descendants of Talaings captured by U Aungzeya at Pegu.

intoxicating liquors and he improved the administration of justice and forbade the decision of cases in the private houses of the magistrates ; every judicial order was passed in public and duly registered."

construc- n of iung- hu's ial.

At the end of 1758 on his return from a small expedition to Manipur (Cassay) in which he found no one to fight as the Raja and people had fled to the mountains, U Aungzeya, as Alaung Sithu had done before him, ordered a canal (the old Mu) to be dug from near Myedu to the Mahananda Tank and the Mu river to be bunded. When this work was completed he floated down to Môksobo in a boat built for the purpose in Myedu.

ath of Aung- a.

Very shortly after this he was called away to suppress a rebellion in Pegu, and from thence he marched on his last adventure in Siam where he died in May 1760.

ungdaw-

Alaungpaya was succeeded by his eldest son, Naungdawgyi, who had accompanied him through ten years of fighting. At Shwebo between the present cantonments and the Mahananda Lake, Naungdawgyi built the Shwebawgyun Pagoda in commemoration of his father's victories. A silver scroll found inside states that relics and images of Buddha were deposited inside with numerous other treasures, and that figures of elephants, horses and soldiers armed with swords, spears, guns, bows and arrows were placed with them to protect them. Some of these brass soldiers in obviously European dress are still to be seen in a museum in the Shwetaza Pagoda to which they have been removed. Naungdawgyi moved the capital to Sagaing and from that time, except for a short period in the reign of the Myedu Min, Maung Louk, who assumed the names of Sinbyushin on succeeding him, Shwebo ceased to be the capital of Burma.

dawpaya zes the one, 1781.

Bodawpaya, the fourth son of Alaungpaya, who had resided in well assumed love of retirement sometimes at Ava and sometimes at Môksobo (Shwebo) in 1781 organized the usurpation of the throne of Singu Min, Sinbyushin's successor, by an idiot boy Paung-ga-sa Maung Maung. As soon as Singu Min had been put out of the way, Bodawpaya left Shwebo where he had gathered 4,000 men and marched to Sagaing. There, probably in accordance with prearranged plans, he received deputations from the leading personages entreating him to come and assume the reins of government which Maung Maung had been found unworthy to hold. This he did, and Maung Maung having reigned for one week was executed in the usual way, being sunk in the river between two jars.

e Nga w Ngè ellion.

The reign of Bodawpaya (1781-1819) was marked by the rebellion of Nga Taw Ngè, a posthumous son of Paunggasa

Maung Maung, which is described in full in Appendix C of the Shwebo Settlement Report 1906. At the age of 22 Maung Maung's son, whose real name was Maung Yaik, fled from the palace at Amarapura and wandered about following the profession of a tattooer until 1805, when, after collecting followers, he marched down the old Mu Canal (Myaung-baung-yo of Alaung Sithu) to Myedu, invested the town, and, leaving a detachment of his army encamped to the north of Myedu, and the main body at Lebyinkye plain south of Sittaw, proceeded with a small force to Kyunhla. There he erected a temporary palace and a stockade on the hill on which the police-station and the Myoôk's Court now stand and set up eight white umbrellas, open, in token of his sovereignty.

The Indaing Shwehmu and the people of the villages in the Pyaungthwè valley flocked to his standard, but the Shwehmu of Upper Kyauksin, Katha District who had been unsuccessfully attacked by the pretender at an earlier date, reported the rebellion to Bodawpaya. The latter was at first incredulous that a boy from the jungle (*Taw-ga thungè*) should attempt to seize the kingdom, but at last was convinced by confirmation of Maung Po's report about the white umbrellas, and sent a force against Maung Yaik, now nicknamed Nga Taw Ngè from Bodawpaya's disparaging remarks. The rebels were defeated near Sittaw south of Kyunhla Maung Yaik was captured later near the Chindwin, and burned to death at Ava, being of royal blood. The Pyaungthwè Valley whose inhabitants had supported Maung Yaik, was mercilessly harried, the villages laid waste and the people put to the sword. The rebels with their wives and families were collected and burned to death in huge bamboo cages, called "*Milaungdaik*" at Kyunhla, Thayetpin, Mawkè and Ponzu.

Dr. Ricl son's jou 1837.

Although Tenasserim and Arakan had been annexed early in Bagyidaw's reign (1819–1837) very little was known of Shwebo, Captain Baker being the only European, other than the Roman Catholic French Missionaries, who had visited the district. In 1837 Dr. Richardson, who was at the court at Ava with the British Resident, Major Burney, had, in the words of Captain Yule "the opportunity of visiting part of Burma Proper, previously unexplored, being permitted to travel from Ava through the districts of Moutshobo and Dabayin." Parts of his diary are interesting and are reproduced verbatim below. Dr. Richardson marched by land from Sagaing by the usual route, passing east of the Yemyetgyi Lake to Ketka (the present Railway Station), and from there through Ônhnèbôk, Kanbè, Inbè

and Thayaing, to Halin where he stayed the night of the 22nd/23rd January. Next morning:

"8 a.m. leave Halin, immediately after which cross for a few minutes some high broken ground, at the foot of which cross some marshy grounds in the salt fields; at 8-30 the paddy fields and cattle of the village; 9-30 grassy plain and open jungle; 9-40 jungle closer; 10h. pass a small village of 10 or 12 houses called Tha-men-khyet-tsain, or cooked rice shop, where three people may dine well for ¼ of a tikal, the inhabitants of this place belong to Mout-sho-bo; and come out here, and to some other villages of the same name in the neighbourhood in the fine monsoon, to keep these shops:—10-30 a small village or station with its paddy ground and cattle; 11-50 arrived at Mout-sho-bo, famous as the birthplace of Alompra, a walled city of two miles square; the walls principally of bricks, partly of a kind of slate, are still in pretty good repair, though the city was at one time, since Alompra, entirely abandoned, and has only of late years been reoccupied; it is said to contain 1,000 houses, which I should think rather under than over the true estimate, though there are extensive paddy fields, (amongst which many of the descendants of Alompra are living by their labour) to the northwards and westwards, between the inner brick walls and the outer wall, or earthen mound, round which is the ditch. To the southward, there is no earthen wall, and the ditch is close to the brick walls. The inner small fort or rather palace enclosure (for it is without flanking defences of any sort, as indeed, is the large one to any extent) is entirely without inhabitants. The old palace nearly all down and overgrown with long grass and creepers. It must have always been confined, as the Lhwot-tau and platform for the gong for striking the hours are divided from it, within the same enclosure by the brick wall. The large pagoda called the Shwetaza, or Nae-wadi-see-thoo koung-mhoo-dau, is of considerable size, but no gilding is now visible on it. 12-20 start and 1-25 pass out of the Kathee gate of the outer wall; the ditch, which on the south side is empty, and might be crossed without notice, is here in tolerable repair and between the gateways to right, full of water. (*Note.*—I was told that the ditch could at any time be filled from the Kandau-gyee or great Royal Lake, which lies about two or three miles to the north-east). 2-35 a small village (Thamenhyet-tsain): 3h. pass Kadoum (Kadaung) a village of fifty or sixty houses: at four halt at Kyayowa Village of about 200 houses. In first part of to-day's march has been less under cultivation from Mout-sho-bo: hitherto it has been almost continued; cattle and water

abundant, the road good throughout. 24th 8 a.m. leave Kyayowa; 9-15 pass the second Kyayowa of which there are three established by Bundoola when he was Myowoon of Dabayin, and governor of the northern provinces; pass a small grassy lake and the third Kyayowa; 10-30 pass Mendoon (Myindaung?). In the jungle to the north of this, which is scantily inhabited, there is a herd of 50 to 60 elephants which are exceedingly destructive to the crops in the neighbourhood. 12-45 came on the banks of the Moo River now easily fordable on horseback but of much greater extent and depth in the rains. There are now two streams of nearly equal size with an extent of perhaps 100 yards of land between; the whole from bank to bank cannot be less than 400 yards. Crossing which river and waiting at Ye-u, a larger village on the western bank for some fresh horses detained us till 2-5 p.m. and at 3-15 halt at Pha-langoun (Palangon). Paid my respects in the evening to the Tabayin Myowoon (a relation of the Queen's) who is a Mingyee and in addition to his Myowoonship also governs the northern provinces; he is a man of about 45 years of age of intelligent and rather prepossessing appearance; he was engaged in the usual important duty of witnessing a Pwe (or natch) on the occasion of calling Thadoo to a new pagoda many of which edifices and some magnificently gilded, with Phoungyee houses and tank attached, have been constructed by him and his predecessor, proclaiming the richness of his government."

" The hills to the northward were visible till noon since which I had not seen them, inhabitants, cattle, cultivation and water plentiful, and roads good for any description of carriage at this season."

" 25th. Halt at Pha-lan-goun (Palangôn), which is a larger scattered village of probably one hundred and fifty houses (I discovered on my return that I had considerably underrated the population of this part of the country); the Governor of the northern provinces has now his residence here. The city of Debay-en (Tabayin), from which he takes his title, is situated about six miles to the south-westward; it is nearly depopulated, and the walls entirely out of repair. He (Myo Woon) furnishes from his government (which extends now since the removal of the Myo Woon of Moutsho-bo, from the Tsa-gain territory to the Khyen-dwen) three thousand and six hundred soldiers and six bos or officers. Three hundred of them have been exercising with muskets last evening and today, assisted by some natives of British India, six of whom left Ava three months ago, receiving twenty five tikals each. They say they have been drilling recruits to the northward, and are now about to return to Ava.

Grain here is plentiful and tolerably cheap; paddy at from fifteen to twenty tikals per hundred baskets; cholun (pyaung), ten tikals per hundred baskets, and sessamum-oil one quarter tikals the viss, and palm-sugar (a large quantity of which is made here, and sent to the other parts of the country, even exported to Rangoon; the season for entering on the manufactory commences the end of next month, February). I understand it sells for fifteen tikals the hundred viss. Though cattle are so plentiful here, I am told that as much as eighty tikals is sometimes given for a good caste bullock, with the proper marks; but cows and the common bullocks sell from five to eight or ten tikals; and for common draught cattle, from ten to fifteen."

" Got some good coolies and horses here."

" 26th. Left Pha-lan-goun, (Palangon) at 8-55. Pass Sedi Mee (Sithèmye) a village of 30 houses—9-25 Way They (Wathè) of the same size; 10-10 Yowatheet about 100 houses, which is called Ywama or chief village, (Ywathitgyi Ywama) from which many nameless villages in their neighbourhood are offsets; 11-25 cross a small nala and 8-12 halt at Myago (Myegu)."

" The whole march to-day has been one uninterrupted sheet of cultivation; the soil rich clayey loam, the crops heavy and close, and the whole country studded with palm trees, round which the paddy is sown with no more loss of room than the size of their trunks. The trees most numerous in the jungle are the theet-tse (the wood-oil tree), which were in full flower on my return on the 19th February."

" 27th. Leave Myegu 7-35 pass a small village where sugar is made; 9-30 another small village of 5 or 6 houses, —small stream—cross the wide bed of a nameless mountain stream in which the stream of water at this season is not ankle deep; from this there is a slight gradual ascent;—at 4 pass the village of Yowa-ngay (Ywangè) 20 houses, 4-50 halt at Benthee in the jungle. No village and very little water, the road has been good as usual, but entirely in the jungle."

" With the exceptions of the little village Yowa-ngay we have seen neither inhabitants, cultivation, nor cattle, and the palmyra has entirely disappeared; the jungle has been open, principally composed of en trees; some teak of fair size, and a great number of theet-tse trees." In a note he adds, of Ywangè: " this is the only village left of several very large ones, which were situated here and were destroyed by robbers before Bundoola, who immediately preceded the present Governor, was appointed to this province. They

came from Lado (Hladaw), about eleven miles south-east of Moutshobo. Their chiefs, wearing gold chattahs ransacked the country sometimes with two thousand followers. Bundoola, however, cleared the country, which has remained quiet since, and travelling now is perfectly safe."

In 1837 while Major Burney was still Resident at Ava, Shwebo was again the scene of rebellion. An account of this is given by Yule (page 224). "On a certain occasion, the ministers under the influence of Menthagyi " (the queen's brother, formerly a fishmonger)" ordered a military force to search the house of the Tharrawaddy Prince for a desperado, who was reported to be secreted there. The Prince's people having first driven off the assailants with disgrace, he fled, with his partisans, across the river to Sagaing, and thence to Mout-sho-bo. This was on the 24th February 1837." Tharrawaddy K[...] baung Min's reb[...] lion.

"From Mout-sho-bo, Tharrawaddy sent out his emissaries in all directions to stir up discontent, or (in his own words to Burney) " to set all the country a-boiling and abubbling."

"A large rabble army of such as flocked to David at Adullam gathered rapidly to his standard. Thousands of men were hastily collected by the alarmed Government; but they had no stomach for fighting in that cause, and speedily dwindled away."

The troops sent up from Ava did some fighting south of Shwebo near Saingnaing. The Paukkan Bo, Sibôktaya Bo, Thalôn Sitkè, Thitseingyi Ywathugyi, Tabayin Myoôk, Ngayanè Myothugyi, the Pathi (Mahommedan) Thwethauk, the officials of Lower Myedu, and the Indaing Bo are mentioned as the first to join Tharrawaddy with their followers. The Pyinsala Wun was apparently against him. The account continues:—

"Burney's timely council had been neglected when it might have saved the Government; and it was too late when they at last declared themselves dependent on him alone for council and assistance. Though in shattered health, he undertook to go to Mout-sho-bo, to bring the Prince to terms. But the time was past." (Major Burney went up to the camp at Thayaing south of Halingyi and arranged a truce and then proceeded to Shwebo where he saw Tharrawaddy). "Tharrawaddy listened to him, but was now confident of success, and scouted compromise; and the bandits who surrounded him were hot for the plunder of the city. The sack was, however, averted by the Resident's exertions, which extorted a pledge from Tharrawaddy that the city should be spared and no life sacrificed, if the ministers should surrender. Early in April the city and all the ministers and princes were in the hands of the insurgent.

Tharrawaddy at first called himself only King of Yadanathinga or the Konbaung*; but at the end of the month he proclaimed that his brother had resigned the authority into his hands, and he took possession of the palace. In June the King left the city in charge of Maung Thaung Bo, a notorious robber, and proceeded up the Irrawaddi to Kyaukmyaung carrying with him the whole court, a large part of the population the ex-King and Queen, and the wretched Minthagyi. The King after several months' residence at Kyaukmyaung, where he had purposed to establish his capital, abandoned that whim and returned to Amarapura, which he proceeded to re-occupy."

While at his temporary palace at Kyaukmyaung, the Konbaung-set History notes that he reorganized the distribution of military service in the *Myin-nè* of Yadanathinga (Shwebo). There were four *Gaungsus*—one horseman was supplied by every 10 houses and for each 100 horsemen one *Myingaung* and ten *Myinsis* were appointed.

Tharrawaddy's son and successor Pagan Min was in his turn deposed by Mindôn Min, a great grandson of Alaungpaya, and "the only thoroughly respectable man of Tharrawaddy's numerous family." He too in accordance with family precedent made Shwebo his starting point.

Mindôn Min's Rebellion.

Mindôn Min was living at the capital with his brother Kanaung Min when in 1852, during the 2nd Burmese war a dacoity took place, of which, after an irregular inquiry some Shwebo followers of Mindôn were accused. The Prince's officials were ordered to arrest these men, but the manner in which the business was being conducted persuaded him that a conspiracy was on foot against himself and his brother. They already had a following in the towns and villages of the north including Madaya, Singu, Kyaukmyaung, Shwebo, Myedu, Tabayin, Pyinsala and Tantabin towns and, a few of the officials, the Kyaukmyaung Myoôk for one, were friendly also.

In December 1852 they escaped together from the capital at night with their wives and families and made their way *viâ* Madaya to Singu, gathering followers on the way and not a little harassed by the force sent by the King to capture them. On arrival at Singu all crossed in haste taking the Singu Myoôk with them bound, and leaving 60 men with just enough boats to cross. On the Kyaukmyaung side they lit lamps and beat gongs and succeeded in giving the appearance of a large army encamped. Their pursuers alarmed at the array moved a few miles south and crossed at Makauk and Mala, and then, marching north, walked

* Note.—Two of the five names of Shwebo of which Mout-shobo is a third. He is popularly known as Kônboung Min or Shwebo Min.

straight into an ambush of Mindôn's men and were badly cut up. Mindôn at once sent a party forward to take Shwebo which was strongly held by the Myo Wun and his *gaungs*. The first attempt failed, but they fired the houses, and on a second attack entered the town. The Wun escaped, and Mindôn occupied his house pending the erection of a temporary palace. He was joined by Nga Shwe Byin, the Hladaw Bo, (who subsequently became famous as Shwebo Kayaing Wun under Mindôn and Thibaw, and whose son was appointed Myoôk at the annexation, and later an Extra Assistant Commissioner,) and also by most of the remaining officials of the Shwebo province, and, with their assistance, he was able to defeat a force sent against him at Ta-ôn and Halin. Bo Hlaing, the old Myedu Wun, was sent to round up Tabayin. Pyinsala-Tantabin and Myedu and soon the majority of Shan Sawbwas, the Myosas, Myoôks, Wuns, Myingaungs, Myinsis and Thugyis in the north acknowledged him.

On the 1st January 1853 Mindôn's troops under his brother, whom he had made Einshe Min, arrived in Amarapura and on the 18th February entered the fort. Mindôn remained during this time at Shwebo and on the occupation of Amarapura was proclaimed King. He had been all along against the war with the British, and, while still at Shwebo, he sent envoys down the river to treat with General Godwin. Although he would sign no treaty, the British Government was satisfied with his expressions of good will and a declaration of peace followed. Before leaving for Amarapura in November he had the chief tanks near Shwebo, the Mahananda Tank and the Yinba, Gyogya, Singut, Kadu and Palaing tanks, repaired, and set up a stone inscription on the embankment of the Mahananda Tank, a translation of which is given below. He continued to take an interest in the district, and in 1866 ordered the repair of the canal known at the present day as the Muhaung (the *Myaung-baung* of Alaung Sithu) from Myinkwadaung north of Myedu down to the Mahananda Tank, and its continuation thence, east of Shwebo, to Halin and the Yemyetgyi Lake in Sagaing District. This work was carried out by villagers ordered out from Yatanathinga (Shwebo), Myedu, Kawthandi, Ngayanè, Tantabin, Tabayin and Pyinsala provinces under the supervision of the Einshe Min and other officials.

The Padei Prince's Rebellion.

The District was to see yet one more rebellion, that of the Padeinsa Mintha in 1866. The Padein *sa* was the son of the Einshe Min, murdered by the Myingun Prince in his unsuccessful palace revolt of that year. All Shwebo, Tabayin, Myedu and Pyinsala rose to join him, and the Ta-

bayin Wun took charge of a part of his army which set off *via* Sheinmaga for the capital. The Pyinsala Wun, Maung Aung Myat, commanded a force which marched down the east bank of the river, where most opposition was met, and heavy fighting occurred near Madaya. A further force marching down on the west of the river was under the Tabayin Sitkè. The rebellion was quickly crushed, but was followed by no such reprisals as marked the defeat of Nga Taw Ngè. The lands of the rebels were, however, confiscated and the district was disarmed, all arms being handed over to the local officials who were made responsible for the maintenance of law and order.

order in baw's n.

But for this outbreak the district was peaceful throughout Mindôn's reign. He organized its administration and as is instanced above interested himself in its prosperity. But on his death in 1878 and the succession of King Thibaw the whole condition of the country changed. In Tabayin and Myedu where the Wun, U Mo, had ruled peacefully and with a certain measure of honesty for some thirty years, dacoity broke out on all sides. Maung Hla U was the chief leader, and he with seven celebrated Bos under him, occupied the Payanpaga Taw Gyi with his headquarters at or near Tantabin-Magyiôk. Bo Myè Gyi with a like following lived in the Hnaw forest. Bo Thaung and Nat Shin Ywe Bo were sent up with troops from Mandalay in 1884 to restore order, but the dacoit Bos retired into the jungle only to appear again when the King's troops had retired. Although Hla U was induced to come in and was imprisoned by Thibaw, the disorders had in no way abated when the British moved up the Irrawaddy to annex Upper Burma. The Linzin Bo who was Wun, was called away to Mandalay and his successor, on being attacked by dacoits bent on seizing his *thathameda* collections, fled to Alôn. The Shwebo *Myin Nè* on the east of the Mu River was quieter being under a stronger Wun, Bo Shwe Byin, whose son actually set off after they had heard of Thibaw's removal, to pay in the *thathameda* collected to the new Government.

ts the ation, bo 86.

After the occupation of Mandalay by British forces on 3rd December 1885, Shwebo was first visited by Brigadier-General Norman who arrived there on 15th December. General Norman found all the villagers quiet and friendly and returned to Mandalay whence two companies of the Royal Welsh Fusiliers were sent up to occupy the town.

This small force arriving on 23rd December found that in a week the situation had entirely changed. The alteration was due to the Minthas (Princes) Teiktin Hmat and Teiktin Thein, who had escaped from Mandalay early in December,

and following the precedent of Alaungpaya's house, had fled to Shwebo to raise rebellion there. The Kayaing Wun Bo Shwe Byin, had been forced to leave the town. The British force attacked Shwebo at once and captured the town, and for the next few days were continually engaged with the enemy. Mr. Calogreedy of the Bombay-Burma Trading Corporation, who had been 15 years resident in this part of the country, had fled to Mutha and induced the inhabitants to come over to the British. Aided by these friendlies the small garrison on the 28th December attacked and temporarily dispersed the personal following of the Prince Maung Hmat near Sibôktaya north-west of Kin-u.

In spite of this defeat resistance increased in volume, and the state of the district is described by the Chief Commissioner, in a telegram to the Government of India dated 10th January 1886 as follows :—

" In the Shwebo District two princes of Alaungpaya's house, who escaped shortly after annexation have raised standard of rebellion. They have 2,000 followers and the countryside is declaring for them. Our force at Shwebo defeated them once or twice, and we hope to attack them with guns and cavalry by combined movement from here and Shwebo about 16th or 18th. Country north and west towards Chindwin in a state of anarchy. Officials have either fled or joined dacoits. We hope to send troops there after Shwebo District is cleared. We have Civil Officers at Shwebo who will organize district police."

By the 12th January the garrison had been reinforced by 50 Royal Welsh Fusiliers and two companies of the 12th Madras Infantry, and on this day Maung Hmat's new force mentioned above was attacked near Kadu-Kunitywa. " Five hundred dacoits with muskets were posted in a pagoda which had a strong wall five feet high all round it. These were under Bo Thaung, a well known dacoit leader in Mindôn's time. Another force of 1,500 armed with das and spears was assembled at some distance away and with them was Maung Hmat. Our troops opened a very hot fire on the pagoda and advanced quickly to the attack as at Shwebo. The enemy's fire must have been well directed, for the first volley wounded three of our officers, Colonel Simpson, Lieutenants Carnegy and Gywnne. The wall was taken without further loss of men and the dacoits fled." (Grattan Geary.)

The Mintha Maung Thein was killed towards the end of January by friendlies acting under the Sitkè of Malè, but Maung Hmat was reported to have managed to join forces

with the famous Hla U. The latter had been released from prison by Thibaw and ordered to fight the British with the help of his old followers whom the King summoned by proclamation. But, instead of this, he had returned to his old haunts on the Tabayin-Alôn border. These two with their combined forces were attacked on January 26th in their position on the Mu River. The "fighting Welshmen" crossed the river, rushed their stockade and killed 53 of them and returned at 11-30 to get out of the hot sun.

The Hlutdaw had been invited to carry on the provisional administration of Shwebo District, together with that of Sagaing, Ava and Mandalay Districts, on behalf of the British Government, and they had gone to the extent of proposing to place the ***Shwe-win-daw-hmu***, Bo Byin, in charge of the Shwebo or ***Yatanatheinga kayaing*** with five companies of police armed with muskets to assist him, each company consisting of one ***Tathmu***, two ***Thwethauks***, 10 ***Akyats*** and ninety ***ahmudans***. Bo Byin was too old, and difficulties arose over the pay of the police, and in February the scheme broke down and was abandoned. Many of the Burmese officials had, however, co-operated loyally in attempting to put down the disorder, notably Sitkè Maung Tun, Bo Byin's son, who was made Kayaing Myoôk. He accompanied the troops on many of their expeditions with his mounted "friendlies" whom he hastily collected together when asked to support, and later furnished much invaluable information and assistance in the appointment of reliable officials to carry on the administration. He was afterwards appointed Extra Assistant Commissioner and now lives in retirement at Hladaw.

In consequence of the decision to carry on direct government, Mr. W. N. Porter was posted to Tabayin District, but being directed to proceed to Shwebo and assume charge pending the arrival of the Deputy Commissioner Mr. Eales, he took over from the Officer Commanding there on April 2nd. Almost immediately after taking over, Mr. Porter started off with 300 men to attack Maung Hmat who was reported to be at Uyin on the west bank of the Mu with 3,000 followers. All Tabayin had embraced his cause, the Kabo Myinsi was rumoured to have joined him, and his outposts had crossed and burnt several villages on the east side and surrounded the Madaingbin Thwethaukgyi, who was firm in his allegiance to the British. At Mutha on the 4th Mr. Porter's force under Captain Smith heard that the rebels had recrossed the Mu and were in force at Kawthandi, Mogaung and Chinbyitkyin between the old Mu and the Mu River west of Tangôn. The friendlies from Mutha

who had been joined by Bayingyi Kalas (Christians) from Chantha on the Tabayin side, drove off a post at Thawutti, and on the 7th the main column attacked Chinbyitkyin. The enemy fled in confusion across the river losing about 30 killed and several prisoners. Kawthandi and Mogaung were attacked next day, but the rebels, reported to number 2,700, made no stand and were pursued by cavalry, Maung Hmat, the Mintha, fleeing towards Wuntho. The good effect of this expedition was evidenced by the submission of a number of previously recalcitrant officials of the Shwebo and Myedu circles and by the receipt of overtures of surrender on behalf of several dacoit leaders. About this time Mr. Porter reported that the country to the north and east of Shwebo was richly cultivated and thickly populated, but most of the villages had been dacoited and British influence nowhere extended beyond the radius of 15 miles.

During Mr. Porter's absence, Mr. Eales arrived on the 6th April and his first report noted that in addition to the followers of Maung Hmat and Hla U there was a third strong gang of dacoits in the district under the leadership of Nga Yaing. This gang of about 1,000 or more was operating in the south and had looted Halingyi, while in the north another gang was equally strong under Maung Pyan Gyi, ex Wun of Singu. On the 17th Major Atkin, R.A., accompanied by Mr. Eales, started with a force of 60 rifles of the Royal Welsh Fusiliers, 60 rifles 12th Madras Infantry, 20 mounted infantry, 30 cavalry and two guns, with the object of surprising Pyan Gyi at Kin-u. The rebels (1,500 in number) were caught completely unprepared and driven on the morning of the 18th from two strongly walled enclosures; the cavalry pursued and 69 of the enemy, including one Bo, were killed, with only one casualty to the attackers. On the return of this expedition they found that during their absence a small body of mounted dacoits had set fire to the outskirts of Shwebo Town, penetrated to the jail, and released 15 prisoners.

On the 26th an expedition moved out to attack Nga Yaing, but the gang dispersed before it was attacked.

The villages had, in many instances, displayed the greatest eagerness to accept British rule, but they were badly armed and unable to make headway against the numerous gangs which were committing ravages on all sides. Mr. Eales therefore proposed to disarm all hostile and suspected villages and give the arms to trustworthy persons and "friendlies" on pass. Sanction was given for the provisional entertainment of a force of about 500 local police to be organized and led by Mr. Calogreedy, who had expressed eagerness to

do so, and rewards were offered for the leading Bos, accompanied by an offer of a free pardon to all who were not actually leaders and who made complete submission and returned to peaceful occupations. Meanwhile Maung Tun had been made a Myinsaye on Rs. 150 a month and under him it was proposed to appoint a Myauklet and a Taunglet Bo on Rs. 100 supported by Myingaungs.

The district was quieter in May 1886, and the garrison detailed for Ye-u was able to move out. At the end of the month the first batch of 69 Military Police arrived; only eight of them, however, were trained men. Soon after, Maung Tun defeated a large force under Nga Yaing which attacked him in his own village at Hladaw and later dispersed the combined forces of Pyan Gyi and Maung Hmat in the north. A post was formed at Sheinmaga in June and, with the object of putting a stop to the frequent dacoities and attacks on the mail runners on the Kyaukmyaung-Shwebo Road, a raid on suspects was made and the village of Ategyi burnt. An attack by "friendlies" was made in July on a gang at Yatha and Tantabin, and 33 were killed and 92 captured. By these and many minor operations the district was by August brought under control, except in the extreme north and at a point in the south-east where Nga Yaing was operating. Work on the Kyaukmyaung-Shwebo Road, which was put in hand when Mr. Eales arrived, was progressing apace and *thathameda* for the Shwebo and Chaukywa circles was nearly all collected. Before the end of the year Rs. 3,000 had been collected and the district organized into townships and local officials appointed.

In November another action in which a large number of dacoits were concerned occurred at Sabĕnatha, where Mr. Balfour of the South Yorkshire Regiment was killed, and Mr. Rae, Assistant Superintendent of Police, who had taken a prominent part in many previous fights, was severely wounded before the dacoits were driven off. After this the establishment of a post at Tantabin served to prevent further concentrations of large rebel forces in the north. But in the south-east, in the area round Sheinmaga, Nga Yaing continued for many months to cause trouble. Not being able to face the trained troops he was up against, he adopted different tactics. He made it generally known that he would punish any persons accepting service under the British, giving them information or supplies, or assisting in any way. He attempted to attack Maung Tun. He executed a headman, and ordered the villagers of Sheinmaga to evacuate the village and cut off supplies from the British garrison there. Sheinmaga did not comply and on the night of October

in execution of his threat, he slipped in by the north gate and burned the village to the ground under the very noses of the Gurkhas stationed on the hillocks overlooking the place. He always had forty or fifty men with him, but at any time he was able to raise his band to three hundred. River patrols co-operated to keep him from escaping across the Irrawaddy and prevent new followers joining him from the east. He was repeatedly chased but never waited to fight.

Ye-u, 1

Meanwhile on the west of the Mu the work of pacification had progressed more slowly. As mentioned above the Ye-u garrison only marched out on May 1st 1886 and arrived there on the 3rd of that month, finding satisfactory quarters in the Chantha *kyaung*. The town, and many villages around about, were found burnt to the ground, not one of the 400 houses in Ye-u being left standing, and only 25 families remaining. Prince Maung Hmat had rallied east of the Mu at Chinbyitkyin, Tinkôkgyi and Naungbinseik and was proposing to join Hla U. This junction had been prevented hitherto by the excellent behaviour of the Mutha, Madaingbin and Tôktalôk "friendlies." The Mutha people had recently defeated Hla U's gang and killed 55, Tôktalôk had beaten off an attack by Maung Hmat, but, owing to the treachery of Maung Mya, the Inkôkka Thugyi, had on 30th April been taken and burned, the dacoits throwing the dead bodies into the wells to poison the water. The experience gained in the actions at Chinbyitkyin on the 27th April and at Kin-u on the 18th had proved beyond doubt that the only effective means of dealing with the dacoits was by means of cavalry. The dacoit bands were ranging themselves along the east bank of the Mu threatening and occasionally attacking the friendly villages on the west. These the infantry were too cumbersome and slow to defend. It was necessary to convince the dacoits that they could be swiftly and surely attacked at any time and in any place, and for this only cavalry were suitable. A hundred Military Police were promised, but the ponies were to be raised locally, a matter of great difficulty, as those possessed by the friendly villages were required by them to mount their own men. The number of mounted infantry was quite inadequate to deal with the situation. The friendly levies, foot and mounted, did invaluable work, especially those of Madaingbin, Tazè and Tôktalôk, already mentioned, who were organized in Tazè under Mr Calogreedy of the Bombay-Burma Corporation. At the latter's request support was given on the 15th May to an attack by these villagers on Tinkôkgyi (on the east bank of the Mu), where the Bo of

Kawthandi had collected 800 men, intending to make a combined attack on Tazè the following morning, together with the Inkôkka *Thugyi* Maung Mya and his following of 500. The " friendlies " under the Madaingbin Thwethauk who later became Tazè Myoôk, succeeded in driving the dacoits out into the open and "the cavalry and police charged through and through them for upwards of three quarters of an hour killing over a hundred."

By the middle of the month the Military Police had arrived, but of the one hundred and eleven men only fifteen were trained. Fifteen Burmans had by this time been recruited and mounted, and ponies were found for a few of the natives but these did not largely augment the effective strength of the force.

In the south of the District Hla U had firmly established himself south of the Payanpaga *chaung*. He did not worry the force at Ye-u. After his defeat at the hands of the Shwebo garrison he had not again attempted to cross the Mu. He contented himself with raising revenue from the villagers under his rule and preventing them from going over to the British. The whole area was completely terrified of him, having experienced his " rule " for several years. He regarded himself as a *Mingyi* if he did not aspire to the throne. Before he died he built a Pagoda at these people's expense. It may still be seen in the compound of the Irrigation Bungalow at Magyiôk.

In the Mahamyaing Forest 30 miles west of Ye-u Maung Myè Gyi, another noted dacoit, together with Zawgyi Bo, was in hiding, but he too was an unimportant factor in Tabayin politics of the moment. It was realized, however, that neither of these two would be above attacking Ye-u should it be left inadequately garrisoned, and a large proportion of the force was thus tied to the town and unable to join in the protection of the Tazè area, which was constantly being threatened and attacked by Maung Hmat's following. A number of *thugyis* from all parts had offered submission, but for the present it could not be accepted as their safety could not be guaranteed. The Deputy Commissioner was very anxious to establish a post at Tazè, but the reinforcements he required were not forthcoming. For the protection of Tazè a force of 600 dacoits was attacked on 29th May in Kyundawgôn. They lost heart and fled. If they had cared to resist they could have inflicted large casualties on the attackers as the village was clearly fortified to withstand the attack of British troops. " It had three stout high stockades, one within the other, about 25 feet apart and each stockade was defended by innumerable

bullet proof log barricades and crow's nests at a distance of about fifty feet apart." This movement and subsidiary actions by the friendlies, kept the area quiet for a fortnight but Tazè was always threatened. At 5 a.m. on the morning of 12th June, 3,520 dacoits, including 42 cavalry, armed with 633 muskets and two brass jingles, dahs and spears, attacked Tazè. Mr. Calogreedy and his friendlies resisted them but were eventually driven out. Pillage and burning had hardly started, however, when a body of 20 Royal Welsh Fusiliers and some mounted infantry and Military Police arrived on the scene. They had slept the night at Pontaga and by good fortune arrived in the nick of time. The dacoits were driven out and followed for two miles. Ninety were killed, and numerous arms and four standards were taken. On two of the standards were painted tigers and the words " Wuntho " in Burmese From this and the statements of the prisoners who said that the force was mainly from Myedu, Wuntho and Indauktha, it was inferred that the Wuntho Sawbwa was aiding Maung Hmat in his depredations. The defeat was evidently severe, though the Shans, who had fled at the first sign had suffered few casualties. Of fifty men Ywathitgyi Village had been forced to supply only 19 returned. Nevertheless by the end of the month Maung Mya, the Inkôkka *Thugyi*, whom it appeared Prince Maung Hmat had earlier appointed Myedu Wun, and who had taken a leading part in this action, had sufficiently recovered to surround Tazè and burn eight villages containing 750 houses to the south of it. A force marched out from Ye-u expecting to find Tazè burnt, but the dacoits did not stand. After their dispersal a circular tour through country not hitherto visited up the edge of the Mahamyaing Forest, was sufficient to quieten the area for a considerable period.

As yet the only collision with Hla U had been when Maung Kyauk Kè (who, with the Madaingbin Twethaukgyi, had been appointed a Thwethaukgyi on Rs. 50 a month) met and killed one of his lieutenants at a village where he was raising revenue at Rs. 1-8 a house for Hla U. Between Hla U and Bo Myè Gyi in the Hnaw forest there had long existed bad feeling arising out of jealousy, and shortly after the above event a skirmish between their two advanced guards occurred at Inbin, in which Hla U's party was worsted. In revenge Hla U advanced up from Yedwet burning villages friendly to Nga Myè Gyi and in a fight between their two main bands at Nagadwin on 17th July Nga Myè Gyi was completely defeated. On hearing of this opportunity Mr. Porter, the Deputy Commissoner, wired to Alôn for co-operation, and immediately set out in pursuit of

Hla U with a force of 80 Madras Infantry, 60 Military Police, 50 Burman Police and mounted friendlies. On 24th July they drove in Hla U's outpost at Pagan and Letti, and later surprised 500 dacoits in the act of burning Kanbya, and attacked them with 100 mounted men.

On the 28th they occupied Magyiôk (Tantabin), Hla U's headquarters, but the rains had now set in and further pursuit was difficult.

The situation now being in hand, a post of about 150 men was placed at Nwabetkyi (Tazè being considered too near Ye-u) to prevent any further massing of dacoits on a large scale in the north. In the south, a post of 200 men was stationed at Mayagan in September for the same purpose. Vigorous operations begun early in November entirely broke Hla U's power before the end of the year, though he himself eluded capture, and during the last few weeks of 1886 the Deputy Commissioner received the submission of a large number of dacoit leaders and their followers, who came in and surrendered their arms.

ification 7-89.

Hla U was killed by his own men in April 1887, and after this except for an outbreak in the Hnaw forest in July 1887 large organized bands were unknown. This rising was headed by two pretenders, Maung Maung Te and Maung Min O. They had raided Zeyawadi, Linbyu and Paungdaung-u before a force from Magyiôk and Kunôn attacked them and drove them into the jungle. A concerted attack was then organized from four quarters from Nwabetgyi in the north, from Paungdaung-u, Kunôn and Magyiôk, and the rising was quickly suppressed.

In August a report from Hluttaik (North of Kyunhla) stated that the Thin-ka-Yaza Mintha, another pretender who had been causing some trouble in that area, had died of fever. Prince Maung Hmat had also died and Maung Myè Gyi had been killed in an encounter with the Civil Police.

The success of the disarmament policy, which consisted of taking the guns from the bad characters and arming respectable inhabitants is shown by the figures from Ye-u district for the year 1887. By the end of that year 1088 guns had been collected, 19 leaders and 197 other dacoits had been captured and 474 dacoits had voluntarily surrendered. Of those who surrendered more than half had been branded in Burmese times as professional dacoits, but the great majority of these men settled down to a peaceful life after surrender. Such dacoit leaders as remained were driven into the forests on the north and their power was gone, but minor operations were still necessary before the last Bos surrendered or were killed. Security of life and

property was already so firmly established by the end of 1887 that many families which had migrated to Lower Burma in the later years of King Thibaw's reign began to return to their old villages. Tabayin which had been destroyed in 1886 was rebuilt in this year.

In 1888 the most troublesome dacoits were Nga Aga in Shwebo, Ye-u and Alôn districts, and Nga Yangyi Aung, Nga Pelu and Nga Thet She, who haunted the Hnaw Forest in the west of Ye-u District, but spread their depredations to the south. These were the leaders of the gang who cut up a Military Police picket at Ywashe in March of that year. After dacoiting the village of Letti they had a dispute which ended in Yangyi Aung killing Nga Thet She and severely wounding Pelu. Pelu was subsequently killed by a brother dacoit in the Alôn District.

In 1889 both Civil and Military Police distinguished themselves in encounters with different dacoit gangs which were at large at the close of the year.

The pacification was complete in 1890, Bo Kan Baw being captured in the Lower Chindwin, Kyauk Lon killed by his own men, while Nga Thon and Aga surrendered. Violent crimes in the two districts of Ye-u and Shwebo fell below 30 in this year.

Some trouble was caused by the shelter afforded by Wuntho Shan State to a few dacoits, and this trouble was brought to a head at the end of 1890 by the resistance offered by the *Sawbwa* to a small column operating against Nga Hmat and Po Thein. Rebellion followed, quickly suppressed by combined operations from Shwebo and Katha. The rebellion over, the greater part of Wuntho State was incorporated in Katha district, two small areas on the south being added to Shwebo and Ye-u. The peace of the districts was thenceforward unbroken.

Part II—Archaeology.

Shwebo, Halingyi, Myedu, Tabayin, Sibôktaya, Sitha **Old Town**
Kawthandi, Ngáyanè and Malè, were *myos,* walled towns, in Burmese times, and remains of the old walls still exist, though some are scarcely traceable. Shwebo, founded by Alaungpaya, is mentioned further in Chapter XIV. The old walls and moat of Myedu are still to be seen though they are very overgrown. According to tradition the first walls were built before the time of Gautama Buddha, by a noble of the court of Bodaw Insana of Kapilawutpyi (Benares). There is record of their having frequently been repaired. For the history of the town see Chapter XIV. The same Chapter mentions the history of Tabayin. The old moat of this town is clearly visible on three sides and parts of the

walls are also to be seen. Sibôktaya is said to have been built in Dwuttabaung's time (4th century A.D.). Sitha was built as a *Kanmyo* by Narapati Sithu as a defence against Shan raids (12th century A. D.). Apart from reference to Ngayanè and Kawthandi in the Hmannan Yazawin, the "Glass Palace Chronicle of the Burmese Kings," the history of these towns is unknown. Other walled towns were Kônmyo, Hngetpyaw, Tantabin and Ywatha in the old Pyinsala jurisdiction, Myohla and Mahabo, founded by King Mingaung I (15th century A. D.) and Kinthamyo, said to have been founded at the same time as Tabayin. The last three are now deserted. The walls of Myohla and Mahabo are traceable near old courses of the Mu River in the west of Shwebo Township, Myohla being near the northern end of the Mingaung Myaung. Kinthamyo is a small island in the midst of Mudein *chaungs*, a mile and a half north-east of Satthe (the topographical maps shew the loop of water round the town). Of the nine towns said to have been founded at the same time as Myedu, only Aungswa can be identified, though the whereabouts of others is vaguely known. Aungswa walls are almost completely washed away by erosion by the Mu river.

alingyi. Halingyi, twelve miles south of Shwebo, is one of the most important prehistoric sites in Burma. It was visited in 1904 by Mr. Taw Sein Ko and his report is given in the Report of the Superintendent of Archæological Survey for 1904-05. Its mythical history is given in Chapter XIV. Taw Sein Ko attributes the decline of the town to the shifting of the bed of the Mu, which he thinks formerly joined the Irrawaddy at Thitseingyi. That Halingyi was a flourishing place some centuries ago is evidenced by some big tamarind trees between Halingyi and Ngapio. These are 24½ and 18 feet in circumference. Tamarind trees of similar dimensions at Pagan are placed at 1059 A.D. There are no villages within the city walls, and the land is partially cultivated. The locality is singularly devoid of ruined pagodas (for the Tawyagu on the western wall is a pagoda of comparatively modern construction.). The salt industry which requires large quantities of fuel has caused the denudation of vegetation, and no big trees are found. Traces of a moat are clearly visible on the northern, eastern and western faces. The city is rectangular in form, and measures about 9,600 feet from north to south and 5,800 feet from east to west. Nowhere do the walls remain standing; the bricks are strewn almost on the level of the natural ground. Judging by the area covered by the broken bricks, the breadth of the walls would appear to be about

16 feet. Breaches in the walls and heaps of bricks at regular intervals mark the places where gates stood at one time. The villagers, who cultivate the fields between the city walls, are said to find, from time to time, objects of antiquarian value, such as gold and silver coins, bronze figures, ornaments etc., but these have been disposed of to others or melted down for the sake of the metal. A few of the coins and ornaments have been preserved to adorn the necks of children. The coins are of equal size and are about seven-eighths of an inch in diameter and in thickness about one-third of a two-anna piece. Their obverse face appears to represent the Dharmachakra and the reverse the Buddhist trisula. These coins were probably brought over to Halingyi by Indian Buddhist immigrants from Gangetic India. In the Report of the Superintendent for 1915 further comments on coins found at Halingyi are made. "The obverse represents the rising sun. The symbol on the reverse is, perhaps, meant for the two principles of good and evil symbolized as serpents." This writer suggests the 17th or 18th century, but the Superintendent comments "The date suggested for the coins appears to be much too late. It is a remarkable fact that they were found at Halingyi, Yamèthin and Prome which were occupied by the Pyu, a tribe of people who have been merged into the Burmese." In addition to a strong local tradition concerning the Pyu Kings, an inscription in Pyu supports the theory that Halingyi was a Pyu city. The inscription is discussed below.

Tomb of Alaungpaya

The tomb of Alaungpaya is situated in the new Sessions Court compound. A wooden *pyatthat* was erected over it in 1898 and a marble tombstone with an inscription in English and Burmese, was laid on the tomb. A contemporary account by Captain Alves of Alaungpaya's death and cremation is to be found at pages 361-2 of Dalrymple's Oriental Repertory, Volume I:—

"I heard a report of the Buraghmah King being dead, and of his eldest son having taken the Government of the kingdom on him, and that he had sent for all the great men in his kingdom to come to Muxabooe (Môksobo) his capital and swear allegiance to him; on enquiring of Antony he told me he believed it to be true, for that the Buraghmah King on his expedition to Siam, which place he had been before some time, was obliged to raise the siege on account of fever and flux he had himself; as likewise one half of his forces, and return home, but he has no other authority for anything he said than common report. ....

He then told me that the late King died on his return from Siam about the middle of May ;......... .... however the generals that kept with the main body of the army kept the King's death private as long as possible, and sent notice of his death to his eldest son, whom they proclaimed King, and sent his father's body with great pomp to Muxabooe, where it was burned."

Pitaka k.

The *Pitaka taik*, or repository for Buddhist scriptures is situated near the Shwe-chet-tho pagoda in Shwebo. It was built by Bodawpaya in 1770 and books were selected and placed there by a Pongyi U Wimala at his order. It was destroyed by fire in 1888. U Aungzeya's Bahosi bell, and other bells may be seen there. The inscriptions thereon are of no special interest.

odas.

inkadaw oda.

By far the oldest and most venerated pagoda in the district is the Theinkadaw Pagoda at Thihadaw village on the Irrawaddy, three miles south of Thabeikkyin, an island in the rainy season. Tradition ascribes its foundation to Asoka in the third century B.C. It has been repaired successively by Alaung Sithu, King of Pagan (1112-1167 A.D.). Alaungpaya (1753-1760 A.D.), Bodawpaya (1781-1819 A.D.), and Mindôn (1853-1878 A.D.) ; up to the time of Singu Min (1775-1781 A.D.) it was a favourite place of pilgrimage for the Kings of Ava. An image of Buddha made of fragrant *Thayetkin* wood was enshrined in the pagoda by Alaung Sithu (1115 A.D.). At the time of the British occupation of Mandalay, the image was found in the palace. It was subsequently transferred to the custody of the trustees of the Shwekyimyin Pagoda, Mandalay. Mr. Oldham visited the pagoda in 1855 and the following account is given in Colonel Yule's "Narrative of the Mission to the Court of Ava in 1855."

" About thirty miles above Tsengoo is Thika-dau a small village of not more than eighteen houses on the west bank and exactly opposite to a small island in the stream, on which is situated an old pagoda and some kyaungs, which occupy all its surface. The upper end of the island is protected by large piles and a framework of timber, but even with this precaution it appears to be gradually wearing away. Round about the pagoda on Thika-daw island are some very good bells, not very large, but very well cast. Of these there are seven and they form very nearly a correctly attuned chime. In fact, a little filing from one of them would put them in perfect tune. They are sufficiently near being in tune to give by no means an unpleasing effect when struck in succession in chimes. "

" Having gone over the island I returned to my boat where a sight awaited me, that I confess astonished me more than anything I have ever seen before."

" On nearing the island as we descended the river the headman in the boat had commenced crying out ' *tet-tet !*' ' *tet-tet* ' ! as hard as he could, and on my asking him what he was doing, he said he was calling the fish. My knowledge of Burmese did not allow me to ask him further particulars, and my interpreter was in the other boat unwell."

" But on my coming down to the boat again, I found it surrounded on both sides with large fish, some three or four feet long ; a kind of blunt-nosed, broad-mouthed dog-fish. Of these there were, I suppose some fifty. In one group which I studied more than the others there were ten. These were at one side of the boat, half of their bodies, or nearly half, protruded vertically from the water, their mouths all gaping wide. The men had some of the rice prepared for their own dinners, and with this they were feeding them, taking little pellets of rice, and throwing these down the throats of the fish. Each fish, as he got something to eat, sank, and having swallowed his portion came back to the boatside for more. The men continued occasionally their cry of ' *tet-tet* ' ! ' *tet-tet* ' ! and, putting their hands over the gunnel of the boat, stroked down the fish on the back precisely as they would stroke a dog.

" This I kept up for nearly half an hour moving the boat slightly about and invariably the fish came at call and were fed as before. The only effect which the stroking down or patting on the back of the fish seemed to have was to cause them to gape still wider for their food. During March I am told there is a great festival here, and it is a very common trick for the people to get some of the fish into the boat, and even to gild their backs by attaching some gold leaf, as they do in the ordinary way to pagodas, etc. On one of these fish remains of the gilding were visible. I never was so amused or astonished. I wished to have one of the fish to take away as a specimen, but people seemed to think it would be a kind of sacrilege, so I said nothing more on the point. The Phoongyis are in the habit of feeding them daily, I was informed. Their place of abode is the deep pool formed at the back of the island, by the two currents meeting round its sides. And it is, it appears, quite a sight, which the people from great distances come to see, as well as to visit the pagoda which is said to be very ancient and much venerated."

ebaw- n oda.

The following is extracted from an article in the Annual Report 1902-04 of the Archaeological Survey of India. "Ancient Relics found in Shwebo":—

"To the north of Shwebo Cantonment is the Shwebawgyun Pagoda built by King Naungdawgyi (1760-63 A D.), the eldest son of Alaungpaya. At each angle of the platform a small pagoda was built by each of his four queens. Three of these small pagodas are standing though in ruins, while the fourth, namely, that of the south-western corner has been removed bodily at some time or other. In December 1902, the central pagoda and the small one to the south-east were dug into by some natives of India and their treasure chambers were rifled. The thieves were detected and sentenced to imprisonment. As the two smaller pagodas, which were still left intact, occupied an unsafe position, the Burmese elders of Shwebo decided to open these and remove their contents to a place of safety. . . . .
Of the objects of religious interest found therein the most important was the series of enclosed boxes or bowls with lids, containing relics. The outer bowl was of brass, the next of copper, the next of silver, the next of pinchbeck, the next of gold, set with emeralds, and the innermost of amber. Inside the amber bowl was a small quantity of fine gravel, with a few small pearls and pieces of gold, which a pious Buddhist regards as relics of the body of Buddha. There were silver boxes, one apparently of Maltese work, and another crescent shaped, a silver candle-holder, and gold and silver scrolls covered with inscriptions."

The following is a translation of one of the silver scrolls :—

"In the month of Tagu of the 2295th year of the era of the Religion and the 1113th year of the Burmese era (April 1751 A. D.), the Empire of Ava, which had been under the sway of the ten Kings of the Nyaungyan dynasty, was subverted, and Alaungpaya, the patron of Buddhism revived the line of Burmese Kings, and re-established the centre of Buddhist influence, by founding the city of Ratánasingha, with its palace, moat, and walls, at Môksobo, where the Shwetaza Pagoda still commemorated the dwelling place of Buddha, when he was born as a white stag. His Majesty ascended the throne in the 2297th year of the era of the Religion and the 1115th year of the Burmese era (1753 A. D.). The founder of the new dynasty died in Kason 1121 (June 1759). The eldest prince, Sirisudhammarājā, who was the heir-apparent, succeeded to the throne. White and red elephants were presented to him

and he assumed the title of "Lord of White and Red Elephants," Siripavaramahasudhammarajadhipati. The boundaries of His Majesty's empire are as follows :—

South.—The sea.

West.—The hill ranges separating Burma from Arakan, Chittagong and Assam.

North.—The tracts inhabited by the Shans and Kachins.

At Shwebawgyun which is about 500 tas (5,250 feet) to the north-east of the royal city, His Majesty built a pagoda in which the relics and images of Buddha were enshrined . . . ." A list of treasures follows closing with the words "at the four points of the compass as well as at the intermediate points, figures in silver and brass, of elephants, horses and soldiers armed with swords, spears, guns, bows and arrows, facing outwards for the purpose of safeguarding the dedicated treasures in the relic chamber ; and figures of armed men and infantry soldiers were interspersed between those of elephants and horses."

The article continues :—"The secular objects embraced a large number of curiosities illustrating the dresses of the soldiery, the kinds of weapons used and the various forms of boats and rifles used in the wars between the Burmese and the Talaings. Most of the figures and models are of brass, while some are of copper, and others of silver. There are numerous soldiers engaged in warlike exercises ; some, with long coats and three cornered hats of regulation pattern are kneeling on one knee taking aim with their rifles ; others, differently attired, are practising with lances. Models of guns too are in profusion, and many of them are labelled with the inscription "Mohein" or "Welkin" resounding (weapon)." Among the numerous boats and rafts, the largest in size and the first in interest, is a large brass vessel, supposed to represent Alaungpaya on one of his numerous campaigns in the delta of the Irrawaddy. It has three masts each surmounted by a flag ; and there is a figure seated in the stern occupied in steering. A sailor half as high as the mast, is climbing up the foremast, and another is standing on the main mast on the look-out. The captain is at the bow with a telescope to his eye. If Alaungpaya is on board he must be below." This boat together with soldiers in three cornered hats, a gun, numerous images of Buddha and some of the other figures may now be seen in the museum in the Shwetaza pagoda where the elders of Shwebo

decided to place them. Thieves have in turn broken into this museum, but it is now securely barred and locked, the keys being held by the pagoda trustees.

"Naungdawgyi who built the Shwetaza pagoda, reigned from 1760-63. Being the eldest son of Alaungpaya, he immediately assisted his father in overthrowing the power of the Talaing, in making the whole of Burma under one rule, and in founding the last Burmese dynasty, which was subverted by the British in 1885. In these wars the belligerents were still armed with bows and arrows and fire arms decided the fate of battles. These weapons were, supplied by the English and French East India Companies."

Other pagodas. Of the pagodas of Shwebo five are mentioned in the well known lyrical poem composed in the Meza Shweli jungle in Katha by Letwéthôndra, Minister, who had been deported on suspicion of intrigue by Sinbyushin. These are the Zibyusimi, the Shwelinbin, the Shwekugyi, the Shwechinthe and the Shwezedigyi pagodas.

More revered than any of these is the Shwetaza Pagoda at Shwebo, built by Narapati Sithu of Pagan (1173-1210). The image of Buddha is said to be made of fragrant wood obtained from Malaysia. The articles of historic and religious interest found in the relic chambers of the Shwebawgyun pagoda (q.v.) have been placed within this pagoda under the care of the Trustees. The calcined bones of Buddha and his disciples unearthed from the other Shwebawgyun relic chambers were divided into three portions and re-enshrined in the Shwetaza, Shwebawgyun and Myodaung pagodas.

The Shwechettho Pagoda at Shwebo was built in 1755 by Alaungpaya on the site where his *chet* or placenta was buried. It was repaired by Sagaing Min, son of Alaungpaya in 1760.

The Maw-daw-myin-tha or Myo-daung-seti at Shwebo is situated at the north-east corner of the walls, and is visible from the railway where it crosses the east moat. It was built by Alaungpaya in 1755 to celebrate his victory over the Talaings. "He proceeded to his capital, where he held a grand festival and surrounded by his court went to worship at the pagoda. He also founded a new pagoda, depositing immense treasure in the relic-chambers." (Phayre). A number of sacred relics, and an emerald alms-bowl said to be that of Gautama Buddha were also enshrined in it. The Trigonometrical Survey of India lopped off the pinnacle of this pagoda and established a station for taking bearings. It has since been given a new *hti*.

The Shwekugyi Pagoda at Myedu was built by Narapati Sithu, King of Pagan (12th century). The image of Buddha is 22½ feet high is made of Saga wood.

The Yokson Paya at Kywèdè was built in 1758 A.D. by Alaungpaya on his march to Manipur to settle the succession to the throne in that country. Pagodas of a commemorative nature were erected at all the principal camps along the line of march. The shrine takes its name from the fact of its being ornamented with brick figures of *bilus* and other fabulous monsters.

The Payagyi Pagoda at Palangôn was built in 1823 A.D. by Nan-ma-daw Mè Nu, chief Queen of Bagyidaw and mother of Supayalat, King Thibaw's chief Queen, Palangôn being the place of her birth. The pagoda is 100 feet high, and the diameter of the base is 92 feet.

The Sinbyudet Pagoda at Sheinmaga was built in 1795 to commemorate the spot where King Bodawpaya mounted the white elephant presented from Tagaung on his return to the capital from Sabenago.

The Tedawya Pagoda at Ngapatkyaung village on the Irrawaddy was built by the Mohnyin Mintaya on his way down the Irrawaddy to invest Ava in 1426 A.D.

The Shwemottaw Pagoda at Malè is ascribed to Pyusawti Min who lived early in the Christian era.

The Shwekugyi Pagoda at Shagwe, the Mo-su-taung at Alèsho the Shwegathit at Thaukkan and others are ascribed to Kyansittha King of Pagan (11th century A.D.)

The Sawpu Pagoda at Sin-in was built by Mingaung I's Queen, Saw Lu (15th century A.D.) and the Myohla Myasigôn Pagoda at Zibyugôn was built by Mingaung I.

The Kala Kyaung Pagoda between Hladaw and Kyigan was built by Kyaswa (13th century A.D.)

The pagodas ascribed to Narapati Sithu (12th century A.D.) are innumerable. Some have been mentioned. Others of interest are the Shwe-myin-wun at Kanthit surrounded by figures of ponies, the Kubyin at Myegu to which Mindôn added a brick pavilion, and the Sudaungpyi at Bôkywa where a large annual festival is held.

Inscriptions

Almost without exception the inscriptions found in, or concerning, the district refer to the founding of pagodas and the dedication of lands thereto, and do not contain any other matter of interest. The inscription in the compound of the Court-house at Shwebo is of this nature. It was erected by King Sinbyushin, second son of Alaungpaya in 1765 A.D. to commemorate the building of a monastery.

scriptions cerning Maha- nda Tank.

Near the second mile to the north of Shwebo town is an inscription, dated 1852 A.D. which was erected by King Mindôn. It records the repair of the Mahananda Tank, and being of interest the translation given in the Upper Burma Gazetteer, Part II, Volume II, is reproduced below.

After a conventional opening concerning religion the inscription continues :—

"The guardianship of religion free from harm rested with the Kings. When Narapa-hti became King he did his royal duty well, like King Dwetabaung, who brought Buddhism from Arimandana to Mandalay, to Sagaing to Shwebo, and to the towns of the south, and like Prince Theddhatta (Siddartha), who with the powers of Mandappa King brought Buddhism into Raja-griha and Mount Meru, where lust no more exists, thus also did Narapa-hti. Thus also did his great descendant, the descendant of the Mighty Conqueror of the World, Mintaya Gyi (King Mindôn). On Friday, the eighth waxing of *Pyatho* 1214 (17th December 1852), he went forth from Amarapura to Yatanatheinga (Shwebo) with his brother, the *Ein-shemin* and with a great army of men. He marched throughout the islands ; he desired the spread of religion and the consequent prosperity of his people. With his young brother he put a stop to the sale, import, and export of liquor, and, because the King of Amarapura was a grasping man and one with little power, he bore the Buddha's teaching in mind and subjugated the whole country, and so, obtaining supremacy, proclaimed himself King on the eleventh waxing of *Tabaung* of the same year (17th February 1853) and all crimes were thus put an end to. Thus King Mindôn became Emperor over one hundred and ten kings that were tributary to him, and yet, powerful as he was, he knew that he would die the death and that his life could not endure for ever. Therefore he bethought him that he must follow the example of the most excellent who had gone before him, and to further the cause of religion he carried out the following acts of charity. He built a number of monasteries and he fed the *Thathanabaing*, the *Sadaws*, and many thousands of *rahans* living in the towns and hills of Yatanatheinga. He fed them daily, and the chief of the monasteries were the Weluwun and the Pyôpayôn. Also he repaired the five ancient pagodas-the Shwetaza, the Shweku-gyi, the Shwechinthe, the Shwebawgyun, and the Shwesimi ; five caves also he set in order and four sacred buildings and eighty-two sacred places at *zayats* in all, built by his forefathers, did he set in order ; the posts also of the ancient palace of Shwebo he caused

to be sculptured into one hundred and five images of Gautama and ninety-eight images of *rahans*, and these he caused to be covered with gold and he worshipped before them. Nor was he content with such acts of charity on which many millions were spent. Like Minlinzaw, who was the elder brother of Narasura, the son of Alaung-sithu who caused money to be taken out of the Royal Treasury in 513 (1151 A.D.), and like Alaungpaya, who carried out works of irrigation; like these great kings of old, he caused the Mahananda tank to be repaired under the direction of the *Ein-she-min* and of the Myodaung *Myosa*, Thado Mingyi, Maha-minhla-gyaw. And this was begun on the third waxing of the month of *Kason* 1215 (9th April 1853). This great tank was first dug by King Alaungpaya in 1115 (1753) under the supervision of the Kyônwun Maha-thiri Ôktama-yaza Thingyan. And the like was to be dug as far north as Myin-kwa-taung, so the length of the embankment from the south-east corner of the tank to the Myinkwa hill is twenty-two thousand *tas*, and the breadth of the embankment at the bottom is fifteen *tas*, and at the top it is ten *tas* and at first the height of it was twenty-one cubits, but King Mindôn raised it to twenty-six cubits. And the number of the sluices is more than two score and the water from the hills flow into it through the Bawdi and the Yeshin, the Teikchinwa and the Indaw streams, and it irrigates a vast tract of country. And the King caused all kinds of lotuses to be sown there and many sorts of water plants were planted, and it became the drinking place of the birds of the air and of all wild animals and human beings, and when it was finished it was like the Nandawun lake in the country of the *nats* and it became world-famous. And at the same time with the Mahananda there were repaired the Gyo-gya-u tank which was dug by Pyu Min and Pyon Min, the Prome Princes; the Singut Tank, which was constructed by the *Ein-she-min*, the son of Alaungpaya; the Kadu tank, which was made by the King Narapa-hti Sithu; the Palaing tank which Patama Mingaung had completed; and the Yinba tank, which was the work of Dutiya Mingaung. All these were completely restored and, when all were done, the King made an order that no birds or animals were to be killed or snared on the Mahananda Lake nor on any of the lakes. Such were the royal orders carried out by Tazein Wun Minhla Thihathu and he inscribed them on this stone. And the inscription was composed by Nemyo Minhla Nawra-hta. The solar King who had compassion on his subjects; who was replete with all the kingly duties; whose

kingdom resembled Nagara in Mount Meru; who spread abroad religion; who was respected by all his brother kings; who suppressed all crimes and civil wars, was most like unto a Buddha. May these Royal Orders be for everlasting."

The map, reproduced at the end of this volume on a scale of one-quarter of that of the original, was executed on parabaik in 1881 by the *She-win-daw-hmu*, the Shwebo Wun, at King Thibaw's order. It shows the irrigation system of the Shwebo *Myinnè* the Mu embankment and the Mahananda Tank. The original gives the names of some 80 pipes. It also shows villages and village jurisdictions.

Pyu Inscription. An inscription in Pyu was found at Halingyi. It is incomplete and untranslated. This is almost the only evidence that the Pyu, the P'iao of the Chinese, who, with their capital at Prome, occupied the right bank of the Irrawaddy, extended as far north as Shwebo. They were subjugated by King Anawrata in 1057 A.D. and disappeared completely as a nation in the 13th and 14th centuries. Most of the Pyu inscriptions—they are few, about fifteen—are very short, being on funeral urns discovered near Prome. The Halingyi inscription is discussed in the Report of the Superintendent of Archaeological Survey for the year ending March 1915 and tentative transcriptions given. It can be "deciphered, but, in the absence of a reliable dictionary or vocabulary,......cannot be translated. It may be referred to the 4th century A.D. or earlier." The second and fourth lines on the inscription "belong to a period earlier than the rest of the inscription. It would appear that the older inscription existed on the stone before the other one was engraved."

Other Inscriptions. A List of inscriptions found in Burma, Part I (Rangoon 1921) mentions some thirty to forty inscriptions collected from different parts of the district in the time of Bodawpaya. This King "noticing the shrinkage of the income of the Royal Exchequer due to the large extent of *Wuttagan* lands or religious endowments, ordered the collection of inscriptions dedicating lands to pagodas with the object of curtailing the area and re-dedicating the lands so curtailed." The new inscriptions engraved by command of the King were deposited in the Arakan Pagoda. A number of the originals have been found and placed in the Patodawgyi Pagoda, Amarapura. These inscriptions refer to five pagodas of Thabuttaw village: a pagoda and monastery of Kadu village; a pagoda in Thayaing; the Taungpato Pagoda and a monastery of Thawutti; pagodas

in Inbè, including the Zingyan pagoda; the Shwegyaung monastery, Inbè; the Kyaukmyatgyi Pagoda, in Shwebo; pagodas at Thalaing; the Mingala-wuttana Pagoda, Taungmyo; the Zedihla Pagoda; the Thitsaya Pagoda, Shwebo; the Tedawya monastery, Ngabatchaung; the Zigôn Pagoda Ônhnebôk; the Neikpanseik-u Pagoda and Bônsantalut Monastery, Shwebo; and the repairing of the Gyogya-u, Mahananda, Singut, Palaing, Kadu and Yinba Tanks by King Mindôn. There are other inscriptions to be found in the district, such as on the bells at Palangôn and at Shwebo and elsewhere, but none of great interest have been discovered.

In the Lawka-u Pagoda at Palaing is the figure of a Bodhisattva such as is commonly found at Pagan. The Assistant Superintendent of Archaeological Survey, Burma, who examined this figure recently says: "The local people who do not appear to have ever heard of the cult of Bodhisattvas . . . . . . have taken the figure to be that of a King, Narapati Sithu, King of Pagan (1173-1210 A.D.), because, they say that there is on one of its fingers the mark of a whitlow, from which the King was once suffering intensely. A Bodhisattva, or future Buddha, is generally represented with a regal dress, either seated or standing. In the present instance, the figure is kneeling and wears a crown with ear-rings and a necklace. It is in wood and what the local people think is the mark of a whitlow is in reality the fold of the upper robe closely clad and held between its thumb and the fore-finger. This hand holding the robe is raised to its breast with the palm inward and the other hand is hanging down. From the style of the figure it appears to belong to about 12th-13th century A.D. Quite possibly it was one of those imported from Pagan."

Figure Bodhisat

CHAPTER III.

The People.

No accurate idea of the population of the district in early times can be formed as there are no sources from which the information may be obtained. Colonel Yule made an estimate of the density of population in the country through which Dr. Richardson travelled on his way to the

Chindwin in 1837,*—namely, the portion of Sagaing District lying north of Sagaing, Shwebo Subdivision, the thickly populated centre of Ye-u Subdivision, and the sparsely populated jungle in the west of the district.

"Taking Dr. Richardson's itinerary from Ava to Kendat, which extended through what he considered one of the most populous parts of inland Burma, and also through a badly-peopled part near the Kyendwen, we find that it gives thirty-seven villages in a line of 221 miles, or, according to the reduced distances as protracted by Colonel Burney, in 176 miles. The latter distance gives one village in 4.75. The number of houses is not always stated by Richardson, but filling up such deficiencies conjecturally from the general character ascribed to each village, I find in the 37 villages, 3,326 houses, or 90 in each village. And, supposing the villages to be no further apart in other directions than on the line of march, we shall have four per square mile, or, say, twenty souls." This figure may be compared with the density ascertained at the census of 1891, namely, 41 persons per square mile.

During the disorders of Thibaw's reign and the early years after the annexation large numbers are known to have left the district, but before the census of 1891 many of these had returned. The population of the district in 1891 and at subsequent census periods was as follows:—

Year	Actual population.	Density per square mile.	Percentage increase in actual population.	Natural population (No. of persons in the Province born in Shwebo).	Percentage increase in natural population.	Emigrants.	Immigrants.
1891	230,779 †	41	...	261,294	...	41,968	8,478
1901	286,891	51	24	331,030	26	53,175	9,036
1911	356,363	62	24	382,006	15	37,868	12,285
1921	391,284	68	10	405,471	6	33,240	19,053

* See Chapter II.

† Adjusted for alteration in district boundary.

The most noticeable feature of this table is the rapid increase in the actual population. Although, during the first decade so many persons migrated to Lower Burma and elsewhere and so few strangers came to settle in the district that the actual population increased by only 24 per cent., while the number of people born in the district (*i.e.* the natural population) increased by 26 per cent., conditions altered during the next twenty years to such an extent, that in spite of the increase of natural population being low, as it was throughout the rest of the province, the actual population maintained its high rate of increase for another decade and dropped only to 10 per cent. in the last decade. The new conditions which increased immigration and checked emigration were the extension of irrigation and the improved facilities for marketing produce by road and rail. At the same time, the supply of suitable waste land culturable without large capital expenditure in the Delta becoming exhausted, fewer persons were attracted to Lower Burma. The Canal areas have naturally absorbed most of the 10 per cent. increase of actual population during the last decade, the population in the Shwebo Canal area having increased by 25 per cent. and in Ye-u by 24 per cent. The unirrigated tracts show an increase of only 3½ per cent., a figure below that for the natural population, 6 per cent. The census year 1921, however, brought the worst harvest that has been experienced in thirty years, while 1911 was a favourable year. In 1921 large numbers deserted the unirrigated tracts in search of employment, some carting produce in the canal areas and some working in the forests of Kanbalu Subdivision or of Katha and Upper Chindwin Districts. Large though these temporary migrations were, the figures may be taken to indicate some permanent change. While the unirrigated tracts of Shwebo Subdivision show actually a decrease of 5 per cent. and a large area in the south-east of Kanbalu Township an even greater decrease, the unirrigated areas of Ye-u Subdivision show an increase of 11 per cent. The increase in the figures for the villages along the railway line accounts for the general increase in the rest of Kanbalu Township, which, in spite of temporary immigration to work in the forests, otherwise shows a decrease. Kyunhla Township shows an increase of 7 per cent., and the group of villages round Kyunhla and Indaing shows an increase of 15 per cent.

Migration

The abovementioned changes in immigration into and emigration from the district are illustrated by the following table.

District.	Immigration. Number of hundreds of persons born in the districts shown in the margin and enumerated in Shwebo.				Emigration. Number of hundreds of persons born in Shwebo and enumerated in the districts shown in the margin.			
	1891	1901	1911	1921	1891	1901	1911	1921
Lower Burma * ...	6	6	15	15	275	341	247	178
Mandalay ...	16	18	22	19	90	66	26	47
Katha ...	2	7	5	5	8	48	44	64
Ruby Mines ...	...	1	...		26	38	26	
Sagaing ...	2	5	29	59	8	9	9	10
Lower Chindwin ...	8	14	13	44	2	1	2	1
Upper Chindwin ...	...	...	1	...	3	9	6	4
Northern Shan States. ...	...	1	...	...	...	2	2	10
Bengal ...	...	5	7	9				
Madras ...	...	6	7	6				
United Provinces ...	...	2	2	8				
Punjab ...	...	6	6	5	Not known.			
Other parts of India ...	...	7	3	2				
China ...	...	1	2	6				
England ...	...	7	5	...				
Elsewhere (not including persons emigrating to places outside Burma).	...	6	6	13	8	18	17	18

* Principally Hanthawaddy, Toungoo and Pyapôn Districts (in that order). Over 1,000 persons were also enumerated in Ma-ubin, Myaungmya, Henzada and Tharrawaddy.

Although census migration figures cannot altogether be relied upon, since they shew only the whereabouts of persons at the actual moment of the census, no matter how temporary the change of residence or the visit may be, they do indicate general movements of population with sufficient accuracy. The decrease of emigration to Lower Burma is clearly illustrated above. In 1911, 66 per cent. of the total emigrants from the district were enumerated in Lower Burma, but in 1921 only 53 per cent. were found there. The 1921 census shows a considerable increase in the emigration to Mandalay (chiefly Mandalay City) and the Northern Shan States, but Katha still absorbs the largest number of emigrants from Shwebo. Much of this emigration to adjoining districts is of course temporary, as the enumeration is made in March when many residents of the unirrigated tracts in this district are seeking casual employment elsewhere. In 1891 and 1901 the Lower Chindwin was the only district in which the balance of migration was in favour of Shwebo. Since the opening of the canals however immigration from both Sagaing and the Lower Chindwin has greatly exceeded emigration to these districts. Part of this immigration is temporary, due to cartmen coming north to sell their wares and purchase paddy, but there has undoubtedly been a substantial increase in the number of immigrants from these districts who have settled down permanently in Shwebo.

The following figures indicate the increase of population and the relative density in townships. Kanbalu and Kyunhla and Tamadaw Townships include immense areas of jungle. The eastern portion of Tamadaw, including Ywathitgyi Village-tract visited by Richardson, is more thickly populated than Ye-u Township, one village seldom being more than a quarter of a mile from its neighbour, but when the jungle of the west is included the density figure is very low. Densit

Township.	Density per square mile.			
	Year.			
	1891	1901	1911	1921
Shwebo ...	102	114	141	147
Wetlet (Sheinmaga) ...	70	84	107	124

Township.		Density per square mile.			
		Year.			
		1891	1901	1911	1921
Kin-u (Chaukywa)	...	115	129	137	146
Malè*	...	13	10		
Kanbalu (Myedu)	...	24	38	34	36
Kyunhla (Indaing)	...	7	9	14	15
Ye-u	...	143	173	210	233
Tamadaw (Shwegyin) *	...	23	33	40	43
Tabayin (Mayagan)	...	54	64	75	89
Tazè	...	37	53	58	63
Shwebo District	...	41	51	62	68

* Now abolished.

The density of the area included in the old Ye-u Township is high, being exceeded in Upper Burma only by the Mandalay and Amarapura Townships of Mandalay District, the Pakôkku and Yezagyo Townships of Pakôkku District, the Myaung Township of Sagaing District, Kyauksè Township and Myingyan Township. In Lower Burma, excluding Rangoon Town, it is exceeded by only one in every eight townships and among them are included Akyab, Syriam, Insein and Moulmein.

The population of the district is almost purely agricultural, the only urban settlement of any size being Shwebo Town, with a population of 10,605 persons. Ye-u the headquarters of Ye-u Subdivision and formerly the headquarters of Ye-u District, with a population of 2,742 persons is a notified area under the Burma Municipal Act. The only village-tracts of more than 500 houses are Seikkun, Chiba, Madaingbin, Tazè, Wayangè, Kaduma, Sanzwè, Halin, Kin-u, Thetpè, Kanbalu and Ngayanè of which only Wetlet, Kin-u and Kanbalu, on the railway, can be said to have important interests other than agriculture.

The bulk of the people of the district belong to the main Burmese stock. In the foot-hills of the north-east, in the north and the extreme west and north-west, the people are of more mixed descent, but ninety-nine per cent. of the people speak Burmese and ninety-seven per cent. are Buddhists.

The census figures for 1921 were as follows :—

Population classified by Language.									
Burmese.	Shan.	Karen.	Kachin.	Manipuri.	Chin.	Indian languages.	Chinese.	English.	Others.
387,140	11	176 *	47	11	11	3,492	295	97	9

* Engaged in Keddah operations.

Population classified by Race.			
Burman.	Indian.	Chinese.	Others.
379,934	9,076	441	1,833

Population classified by Religion.

	Total population.	Buddhists.	Hindus.	Mahomedans.	Christians.	Others.
Shwebo Town	10,605	8,004	970	877	448	306
Ye-u Town	2,742	2,314	185	70	131	42
The District	377,937	368,146	1,383	6,663	1,429	316
District total	391,284	378,464	2,538	7,610	2,008	664

Besides the Burmese there are three classes of indigenous inhabitants, the Shans, the *Bayingyis* (Christians) and the *Pathis* (Mahomedans) or Myedu *Kalas*. Of the 7,610 Mahomedans in the district only 1,004 were immigrant Indians; 5,164 were Burma Moslems; 1,423 were Zerbadis and 19 Chinese. Ninety-eight out of every hundred Christians were born within the Province.

ns. The Shan settlements in Burma, and in this district in particular, date from the reigns of Nyaungyan Min, Maha Dhamma Raza, and Thado Dhamma Raza, in the 50 years between 1599 and 1648 A.D., and originally consisted of captives taken in war by these three kings and their predecessor Buyin Naung. According to the *sittans*, or depositions of village officials, and the annals of the Hlutdaw, the Shans from Mogaung and Mohnyin, captured by Buyin Naung, were first quartered at Makaw (probably near Ava) and afterwards removed to Nyaungbin, Ywatha, Hngetpyaw, Nagasin and Pintha, in what is now the Kanbalu Subdivision of this district. This tract of country allotted to the Shans, by Nyaungyan Min, was called the Pyinsala Nga Myo up to the annexation.

Nyaungyan Min also annexed the tract of the Indaing *Shwehmu*, in the north-west of the district, inhabited by Shans, and added it to the Central Gold tract, Shwe-alegyaung which was part of the district. Some Siamese captives, also called Shans were settled about this time along the Mu, and also at Nwabetgyi, Myedu, Thityabin and Payan. Many of these settlers are said to have returned to their country at the time of the great famine in Bodawpaya's reign (1811—1816). The descendants of the Shan and Siamese captives are now hardly distinguishable in language and appearance from the Burmese population. The Shan language is never used by them, though a number of the older people speak Burmese with a Shan accent.

ingyis. The name ***Bayingyi*** is the Burmese of the word ***Feringi*** the Indian term for Christian, and is now applied solely to Christians of the Roman Catholic faith. The native ***Bayingyis*** of Shwebo District are, for the most, descendants of Christians taken prisoner in the seventeenth and eighteenth centuries. These were chiefly Portuguese, French, Dutch and Goanese or their offspring by mixed marriages.

In 1613, Syriam, where tbe Portuguese had established themselves, was captured by Maha Dhamma Raza, second King of the Nyaungyan Dynasty (1605-18), and a number of the followers and companions of De Brito, the Portuguese adventurer, were spared and sent to Ava. Afterwards "the number of the foreigners living about the place (Ava) gave some uneasiness to the Burmese Government. A certain number of the ablest of the captives were kept at Ava and had for business to teach the Burmese what they knew about military matters. As the Burmans scarcely knew anything about gunnery, the Christians of the Capital were entrusted with the management of the artillery, and up to this day they have remained the chief gunners or artillery

men in Burma. The other Christians were removed to the distant provinces of Tabaring (Tabayin) and Ahlong (Alôn, in the Lower Chindwin District) between the rivers Kyin-douin and Mu. As will hereafter be noticed they settled in villages. They were exempt from the payment of tribute, but had to bear the weight of military service in the same way as they do now" (Bishop Bigandet, *History of the Burmese Mission*).

In 1756 Syriam was attacked by the Burmese this time under Alaungpaya. Both British and French had factories established there at the time, but the British had been imprisoned by the Talaings and were released by the Burmans. Several European seamen from the French ship "Galette," which Alaungpaya had seized, were sent up-country and were added to the Christian communities already formed.

The original villages in which the *Bayingyis* were settled were Chantha, Mônhla, Chaungyo, Saingbyin, Kyundaw and Nagabo. In these villages in Bodawpaya's reign (1811-1816) the number of Christian households was 55, 48, 24, 16, 20, and 17 respectively. There were also 18 *Bayingyi* households in Tabayin in his reign. Their religion has been maintained by Italian and French missionaries, but "many villages, owing to the scarcity of pastoral visits, have become apostate. They have not embraced paganism, though they follow many of its practices in deference to the Burmans." (Bigandet). For this reason, and because they have tended to collect together in the larger villages, the numbers in all the villages except Chantha, Mônhla and Chaungyo had dwindled by 1867 to three or four or none at all. Chantha had 105 households in 1867, and has now 120 or about 600 persons. Mônhla has risen from 64 households in that year, to 70 with some 483 persons.

The *Bayingyis* have largely intermarried with the Burmese population and have now lost all trace of their original names and language. Their mixed descent is however in many cases obvious from their features. The general opinion is that the infusion of Portuguese blood is highest in Mônhla. The ancestors of the Chantha *Bayingyis* were more probably Indian Christians.

At the annexation their villages were all destroyed by dacoits, and, in Novemer 1886, a number were given lands to cultivate near Ye-u on the understanding that they gave one-fifth of the produce as revenue.

Of the Barnabite Fathers labouring in the district the sole records concerning the district are that Pio Gallizia died of dropsy at Shwebo in 1765; a few years later Ambrosio Miconi died at Kyundaw; Butiromonti died at Chantha after one year's work in 1788; Father Joseph D'Arnato, who resided at Mônhla throughout the greatest **Barnabite Fathers.**

part of his long apostolic career of forty-nine years, remained alone in charge of the several congregations of Upper Burma during his last years and died at Mônhla in 1832; Father Andrieno, whose brother was an official at the Burmese court, died at Chantha in 1882. Detailed records of the mission are not available as they had been stored in the church at Chantha, which was totally destroyed by fire in 1840 during the absence of the Rev. Father Polignani, then engaged in erecting a missionary's house at Mônhla. A "seminary for the education of young natives destined to become catechists and valuable auxiliaries of the missionaries" was established at Mônhla in the seventeen-seventies. It was later removed to Nabet.

Owing to the activities of the Roman Catholic missionaries *Bayingyi* communities have been formed since the annexation at several villages other than those already mentioned, and also at Shwebo. The largest Christian settlements are now at Mônhla (243) in Kanbalu township, Chantha (363) and Kanwun (19) in Ye-u Township, and Shwebo Town (324).

ma slems. edu *las.*

The third non-Burman community settled in the district is that of the Myedu *Kalas*, Moslems born in the country whose language and dress are both Burmese. They themselves believe that their ancestors came to Burma in the reign of Thado Dhamma Yaza (Thalun Mindayagyi), but it is more probable that they were prisoners of war taken in the campaign of Buyin Naung against Pegu in 1538-39 A.D. and in the invasion of Arakan by Tabin Shwe Ti in 1546 A.D. when Sandoway was occupied. One of their *sittans* dated 1164 B.E., states that 280 of their ancestors came over voluntarily from Arakan and Sandoway in the reign of Bayin Naung and were allotted land at Myedu, Sitha, Sibôktaya and Tabayin in this district and also at Toungoo and Yamethin. In return for the allotment of land they rendered service as palace guards at Ava. Subsequently in the reigns of Alaungpaya, Naungdawgyi, and Sinbyushin of the Shwebo dynasty they continued to serve as musketeers and received additional allotments of land in Ngayanè, Kintha and Setkaba jurisdictions.

Of the 7610 Mahomedans enumerated in the district in 1921, 5164 were Burma Moslems. They reside mainly in villages in which they were originally settled and in a few adjoining villages, though some new settlements have also been formed in the Shwebo canal area as at Kanthagôn near Nyaungbintha. The largest settlements are Myedu, Sagôn, Thabutkôn, Chinbyitkyin, Bugyi, Kyizu, Wetto and Kyigôn village tracts in Kanbalu township. Of these Myedu, Sagôn, Thabutkôn Bugyi and Wetto villages are predominantly Mahomedan.

At the 1921 census Mahomedans born outside Burma numbered 1,004 persons. Hindus numbered 2,538 persons, of whom 603 were born in the Province. As opposed to the Burma Moslems the immigrant Indians engage little in agriculture either as cultivators or labourers and are employed chiefly as shop-keepers, contractors, masons and coolies. They generally reside in the towns and villages along the railway line, though a few are also found in the larger villages in the interior of the district. Since the 1911 census the Hindu male population has decreased, but this is due, as the decrease in the male Christian population is also due, to alterations in the composition of the military population of Shwebo Cantonment. The increase in the number of Hindu females from 464 to 613 between 1911 and 1921 indicates that the settled Hindu population has in reality increased. **Other races:— Natives of India.**

Chinamen are few and are to be found only in the towns and larger villages on the railway line and in Ye-u. They are contractors, shop-keepers, paddy traders and carpenters. Their number has nearly quadrupled during the last decade and the rise in the figure for Chinese females from 10 to 83 shows the more permanent character of the Chinese population. **Chinese.**

Census literacy figures are discussed in Chapter XII. Shwebo, Katha and Sagaing Districts rank much the same, but do not compare favourably with the rest of Central Burma and the Delta. The figures indicate that the immigrant natives of India are of a slightly better class than in other parts of Burma and that the Zerbadi who forms a large proportion of the indigenous Mahomedan population, is not so well educated as his brothers elsewhere. **Literacy.**

Although caste systems and class distinctions would seem to be non-existent and the slavery of Burmese times at an end, a relic of the past is found in the Magyiôk *taungsas*, professional beggars, or, more properly, pagoda slaves. At Magyiôk, a village in the Kyi village tract of Tabayin township fifty-three households supplement the small return they get from their fields by begging throughout the neighbouring villages as far as Ye-u and Mônywa. A revenue document dated 1876 concerning Tabayin Wunship exempts from assessment under the heading *kyun* (slaves), 44 households of Magyiôk and also 11 households in the Mayagan *thwethauk*-ship, one at Pagan and one at Thinbanbya. These professional beggars may be met with at all times roaming about the country or staying in zayats but at present Magyiôk is their only permanent residence in this district. They are a race apart; other Burmans will not eat rice with them nor intermarry with them. It is **Depressed classes.**

believed locally that if they attempt to conceal their origin they are soon found out. Their ruling *nat* sees to that. If they go away to another place and pose as *lugaungs* and marry, their children will always give them away. The child cries and, on the parents consulting the local *saya* according to custom, the *saya*, after making the usual calculations, finds that what the baby is crying for is the bag *lwè-eit* and *tabo-kauk*, habitually carried by *taungsas*. Professional beggars are found also in a few places in Lower Chindwin District and elsewhere and it is stated concerning them that " their origin as is manifest from copies of the old *Kyauksas*, or lithic inscriptions, . . . was not Burmese. The dedicated persons are in some inscriptions stated to be foreigners, and in others, although the fact of a foreign origin is not recorded in the inscription, the names are Indian names translated into Burmese. No doubt they were captives taken in war, and the separation is not one which arose among the people of one race." They, together with the other classes of *Sandala*, the grave-diggers and others, were under the *Ayut wun* in Burmese times, the " governor of degraded classes."

Villages. At the 1921 census ninety per cent. of the population of the district was classfied as rural, but several of the areas classified as urban are hardly even semi-urban. At the 1918–1923 settlement there were 1,558 villages in the district situated in 640 village tracts. Almost all villages are compact and fenced with thorns. Those lying along the banks of the Mu River are usually pleasantly situated, but in the central plain shade trees are few and villages are bare and unattractive. Many of the houses stand in their own enclosures, but the available space is usually required for a threshing floor or for stabling for cattle, and villagers rarely attempt to improve their surroundings or to add to their food supply by gardening. Within the village roads are narrow, seldom allowing two carts to pass easily. Owing to the overcrowding of the village site and the inflammable materials with which houses are built serious fires are not infrequent.

Houses. Over the greater part of the district houses are raised above the ground level. In the south, however, where the rainfall is low and building materials are scarce, huts on the ground are not uncommon, and in villages adjoining the Lower Chindwin they are the general rule. Houses are usually built of mat walls, plank floors and thatched roofs. *Thetkè* is the usual thatching material except in palm sugar areas where toddy palm leaves are used. Substantial wooden houses are found only in villages close to forests

and in the wealthier canal villages. A considerable number of houses of this type have recently been erected or are in course of erection in Shwebo Town and in the minor trade centres along the railway line, evidence that the middlemen are sharing in the prosperity brought to the district by irrigation.

Rice is almost everywhere the staple article of diet. Millet is regularly eaten only in the *ya* area in the south-west of Tabayin Township, and even there rice is consumed as much as millet. In other southern villages millet is eaten in years of scarcity, and in the jungle tracts indigestible roots are occasionally mixed with rice to make it go further, but this is considered a hardship and is not the general rule. In canal areas the superior and expensive *lonthe* rice is eaten. In unirrigated tracts cultivators cannot ordinarily afford to be so particular. They seldom grow *lonthe* varieties themselves, and in years in which they have to purchase their stock of *wunza* from irrigated tracts they buy *bu saba* which is not only cheaper but also swells into bigger bulk when cooked. Beans, usually red beans (*pègyani*) and common peas (*sadawpè*), are also eaten by every household. *Ngapi* and dried fish imported from Lower Burma or Katha are used everywhere. Fresh fish is scarce. There are 32 slaughter houses in the district, and, though there has been some decrease in consumption in recent years owing to the campaign against cattle slaughter, beef is still hawked about the bigger canal area villages nearly every day. Dried beef imported from India and euphemistically called dried venison is another common article of diet. Vegetables such as gourds, tomatoes and brinjals are purchased from itinerant traders who obtain them in villages along the banks of the Mu or in Chaung-u Township in Sagaing District. For cooking-oil inferior grades of groundnut oil are ordinarily used, unless the cultivator grows his own sesamum. In the irrigated tracts however most are able to afford either sesamum oil or the better grades of groundnut oil. There are no village shops in the district away from the railway line, and few can afford to spend money on tinned foods such as biscuits, sardines and condensed milk which are extensively consumed in Lower Burma. There is however a demand for sweetmeats usually made of rice flour and jaggery, and the number of sweetmeat vendors in every big canal village indicates that there is surplus income available to spend on minor luxuries of this sort. **Food.**

Clothing is still very largely home-woven. At the 1921 census 37,057 looms were enumerated in the district, an average of nearly one loom to every two households. For everyday wear cotton *longyis* and jackets of coarse cotton **Dress.**

(*pyin*) are the rule, but for festive occasions there is usually a good cotton *longyi* with a silk pattern running through it and jacket of *pin ni*, which has now almost universally displaced the white cotton jacket formerly worn. Silk *longyis* purchased in the bazaars are also fairly common in canal areas, but they are seldom home woven except in the neighbourhood of Chiba and Seikkun. Outside the towns European shoes and stockings are seldom seen.

ligious fices and erings.

Every village has its *kyaung* and in most cases these are substantial wooden buildings. In canal areas both pagodas and *kyaungs* are generally in good repair. In unirrigated tracts the monasteries are often in a sad state of disrepair, and new pagodas are more often than not the work of natives of the village who have made good elsewhere.

Outside the towns and richer villages the offerings made to the monks are much less elaborate than those made in Lower Burma. Apart altogether from the poverty of the bulk of the inhabitants of this district there are far more wearers of the robe to share the loaves and fishes than in a Lower Burma district. Thus at the 1921 census there were 4,983 *pongyis*, *upazins*, nuns and ministers of religion supported by the community or one to every 79 inhabitants as compared with one to every 154 persons in Pegu Division and one to every 210 persons in Irrawaddy Division. Here it is no uncommon practice for the donor to purchase at the *kyaung* a set of robes previously presented by someone else and offer them for a second time.

neral osperity.

In a district the staple crop of which is quite unsuited to the capricious rainfall the general level of prosperity is naturally low. At the 1918–1923 revision settlement the average nett annual income of cultivators in unirrigated tracts was found to be Rs. 162 per househould and average expenditure Rs. 157. excluding unusual expenditure on ceremonial occasions. In canal areas the average income was Rs. 339 and average expenditure Rs. 299. The figures are not entirely trustworthy owing to the fluctuations in money values that have taken place during the period covered by the enquiries, but they illustrate the great improvement in the condition of the people who reside in the portion of the district served by the major canals. Not only do they have also more leisure than they could afford to enjoy formerly. Nowadays they can live in their own homes the whole year round if they choose. Before the introduction of irrigation they were compelled, as many cultivators in unirrigated tracts still are, to leave their villages after the paddy crop was harvested and supplement their scanty income from the land by non-agricultural employment

elsewhere. Partly owing to a somewhat infertile soil, partly owing to the charge for water which they have to meet, they are less prosperous than cultivators in the wealthy delta districts. Nevertheless they have undoubtedly achieved a reasonable standard of comfort. What advance in prosperity there has been in unirrigated tracts it is difficult to estimate. Expenditure on living though still low has increased by 75 per cent. between the original settlement of 1900—1906 and the revision settlement of 1918—1923, but this increase is in the main due to the general depreciation in the value of money, the purchasing power of which is estimated to be fully 60 per cent. lower than it was at original settlement. Observers who were present at both settlements are convinced that there has been a distinct improvement in the standard of living since original settlement even in the unirrigated portion of the district. Food is more varied. Houses are better equipped with utensils, and clothing is superior. But as long as cultivation is a gamble in rainfall, and cultivators stake everything on a single crop of rice there is little prospect of prosperity for the greater part of the district lying outside canal irrigated tracts.

CHAPTER IV.

AGRICULTURE AND IRRIGATION.

Agriculture is the chief occupation of the inhabitants of the district. According to the classification adopted at the 1921 census 79 per cent. of the total population is supported primarily by cultivation. Reliable statistics of areas and crops are not available until the year 1907-08 when the Land Records system was introduced into the district. Under Burmese rule the area under the Muhaung Canal and the land lying in the centre of Ye-u Township and south of Tazè Township was very fully cultivated, as it is to-day, but elsewhere there have been large extensions in the cultivated area not confined to the areas irrigated by the major canals, though they have been larger there than elsewhere. Much of this increase in cultivation resulting from settled rule had already taken place before 1907-08. Irrigation from the Shwebo Canal had begun in 1906-07. Even since 1907-08, there has been considerable progress. Between that year and the year 1922-23 the area occupied for cultivation has risen according to Land Records figures from 994,472 acres to 1,103,106 acres, an increase of 108,634 acres or eleven per cent. In a dry zone district, however, where 40 per cent. of the occupied area is ordinarily fallowed, Increase cultivatio

progress is to be tested by increase in the cultivated area rather than by increase in the occupied area. In the quinquennium 1908—12 the average nett cultivated area was 549,410 acres. In the following quinquennium it averaged 634,224 acres, an increase of 15 per cent, while in the quinquennium 1918–1922 it rose to 657,846 acres, an increase of only four per cent. on the middle period. The unusually unfavourable seasons experienced in the last three years of the period have however masked the increase that would be found in a normal season now. Only 28 per cent. of the occupied area of the district is irrigated by reliable major works. Outside this area the percentage of fallows and failures in most years is very high. Between 1908 and 1922 the average area annually followed was 426,871 acres or 41 per cent. of the occupied area. In the same period the average area on which crops failed to mature was 123,657 acres, or over 20 per cent. of the total cultivated area irrigated and unirrigated.

The following table shows for each 1,000 acre cultivated the average number of acres under each of th principal crops for the quinquennial periods (*a*) 1908–12, (*b*) 1913–17 (*c*) 1918–22.

	(*a*)	(*b*)	(*c*)
Rice ...	834	845	784
Sesamum ...	81	76	83
Pulses ...	53	53	97
Mille ...	21	17	22
Cotton ...	3	4	9
Wheat ...	2	2	6
Groundnut ...	...	...	3
Others ...	7	8	9
Total ...	1,001	1,005	1,013
Double cropped ...	1	5	13

These statistics indicate an extension of the cultivation of pulses, cotton, wheat and groundnut. The exceptionally unfavourable rainfall of three years of the last quinquennium partly accounts for the contraction in the proportion of the cultivated area under rice. Under normal conditions the area under rice should not be less than 80 per cent. of the

cultivated area. The large increase in the area cultivated with pulses is due partly to the high level of prices obtained in recent years and partly to successive unfavourable monsoons forcing cultivators to substitute *matpè*, *pènauk* and gram for paddy on embanked land.

Double-cropping.

True double-cropping is not very extensive and is confined to early sesamum followed by beans on alluvial land near the Mu and Sipadôn. Mixed-cropping is however extensive, and the area shown in the statistics as double-cropped (24,689 acres in 1922–23) is due to mixed-cropping being treated for statistical purposes as double-cropping when the two crops mature at different assessment seasons. On unembanked alluvial land late sesamum and *pègyi* or maize and *pègya* are the most frequent combinations, but the most common form of mixed-cropping is *matpè* or *pènauk* sown broadcast in the maturing paddy, after the last water has been released, and plucked up by hand about two months after the paddy has been harvested.

Rice.

With the exception of the *ya* tracts in the extreme south-east and south-west corners of the district, and the *kaing* areas along the banks of the Mu and Irrawaddy and near the Sipadôn, rice is everywhere the crop of supreme importance. The result is that the effects of an unfavourable monsoon are felt more severely in the unirrigated tracts of this district than in the ordinary dry zone district where, owing to the multiplicity of crops grown, all are not likely to fail in the same year. *Mayin*, *kaukti kaukyin*, *kauklat* and *kaukkyi* are all represented in the paddy cultivation of the district. The area under the first three types is small and averages only 7,607 acres. The average area under winter rice between 1908 and 1922 has been 501,728 acres. The maximum area 579,546 acres was recorded in 1914-15, the lowest 387,971 acres in 1907–08 when climatic conditions were unfavourable and irrigation from the Shwebo Canal was only beginning. The figures vary within wide limits from year to year according to the character of the season, but with the extension of irrigation from major works there has been a definite increase in the average area cropped with winter rice.

Of the two main divisions of winter rice, long lived rice (*kaukkyi*) and rice with a medium life period (*kauklat*), the former preponderates in canal areas, the latter in unirrigated tracts. The varieties of rice grown in the district are numerous. Among the short-lived or *kaukyin* varieties are *ngayenwè*, *thalèbyu* and *paungmalaung*. Of the *kauklat* varieties the most common are *bombadewa*, *mèzawgale*, *tokshan*, *kaukthwè* and *ngagyin* ; among the *kaukkyi* varieties,

ngayunwa, *anbaw*, *yathe*, *ngasauk*, *kalagyi*, *mèzawgyi*, *mwezwè*, *taungdeikpan*, *sawbwagyi*, *hmawdaik*, *ngasein*, *bawyut* and *ngathalun*. Of these varieties *ngayunwa* paddy is from many points of view the most important. Originally grown for home consumption, its cultivation has extended rapidly since about 1915 as a result of the premium placed on it by the small millers, until it now occupies more than half the area cultivated with rice in the Shwebo canal area. *Ngayunwa* has a small slender grain with a thin husk. Cultivators estimate that it ordinarily yields about twenty per cent. less than coarser varieties. On the other hand it has a high milling percentage and commands a high price in the rice market as Shwebo *lonthe*. Rice millers ordinarily pay from Rs. 15 to Rs. 20 per hundred baskets more for it than for other varieties. Being a soft-grained paddy it is liable to damage by insect pests and disease, and it is somewhat doubtful whether in view of its lower yield it really pays cultivators to grow it. Preference for a variety for which there is known to be a ready market can however be understood. Of the other varieties *bombadewa* paddy with a short plump grain is the most extensively grown. It is found both in irrigated and *mogaung* areas. *Anbaw* is the chief *kaukkyi* variety in *mogaung* tracts. It is not so long-lived as *yathe*, a high yielding variety, which however is usually grown in favourable situations. *Ngathalun* is a variety of red rice common only in the *tanègyan* basin of the Ye-u Canal area. This variety is broadcasted. Its merit lies in its strongly developed root system which enables it to withstand drought on a *tanè* soil.

Sesamum. After paddy the next most important crop is sesamum. The average area under this crop between 1908 and 1922 has been 49,098 acres or 8 per cent. of the cropped area. It is grown all over the district and is practically confined to unembanked land. In the southern *ya* tracts and in land along the Mu it is grown sufficiently extensively to allow of some surplus for export. Elsewhere it does not suffice for local requirements for cooking oil. The reasons for the popularity of the crop are obvious. In the first place the cultivator prefers to be self-supporting in his food supply of which cooking oil is an important item. Secondly the cultivation of sesamum calls for little labour. After the preparation of the soil and the sowing of the seed nothing remains to be done but harvest the crop. Finally, though the crop is most precarious—heavy rain in the early days of its growth will destroy it as readily as drought—there is always the chance of drawing a prize in the shape of bumper crop. Almost all the sesamum grown is of the late variety, only

five per cent. of the crop being early sesamum. The latter variety is grown chiefly on alluvial soils on the high banks of the Mu or near the Sipadôn. The late variety is grown on all *ya* soils. There are two chief types, one with a life period of about 75 days—*thadunbyu*—the other with a period of about 95 days.

Beans. The group of bean crops now covers a greater area than sesamum. During the ten years 1907-08 to 1916-17 the average area under beans was 29,620 acres. The succeeding five years have witnessed in Shwebo as elsewhere a rapid increase in the area under the various bean crops. In 1917-18 it rose to 53,701 acres, and the average for the period 1917-18 to 1921-22 has been 61,416 acres or an increase of more than a hundred per cent. on the average for the previous ten years. Beans have always been the most important crop grown on alluvial soils in this district, but the war trade in white beans was a powerful incentive to this form of cultivation, and, although the cultivation of the small white bean (*pèbyugale*) was generally abandoned when the market disappeared, the cultivation of other varieties has continued to make headway, the level of prices being far above the pre-war standard.

Matpè. *Matpè* is the most extensively cultivated of the bean group. It is not a new staple, but it has become important only since 1917. Previously its place was taken by *pènauk*, a plant of similar habit and appearance but with a longer pod and smaller beans. *Pènauk* was however grown for home consumption and is still cultivated with this object. *Matpè* is not consumed locally but is grown for export. When grown on unembanked land it is usually found on heavy low-lying alluvial soils from which water is late in draining off. The great bulk of the crop is however grown on embanked land either as a single crop or mixed with the growing paddy. It is found all over the central *tanè* plain, the black soil of which retains moisture long enough to mature winter crops.

***Pègya* and *Pèbyugale*.** The average area under *pègya* (red bean) for the ten years 1908–17 was 9,994 acres. Owing to the *pèbyugale* boom the acreage fell in 1917-18 to 7,543 acres, and in 1918-19 to 7,106 acres, but with the passing of *pèbyugale* it has risen to 17,518 acres in 1921-22. Figures for *pèbyugale* are available only from 1916-17. In that year the area under this crop was 9,128 acres. The following year it rose to 22,670 acres and reached its maximum 28,437 acres in 1918–19. By 1919-20 cultivators had realised that the demand for *pèbyugale* had ceased, and the area under the crop dropped to 10,406 acres or little more than

a third of the acreage of the previous year. *Pègya* was substituted for *pèbyugale*, and the area under that variety increased by nearly a hundred per cent. to 13,998 acres. Since 1919-20 *pègya* has continued to make headway at the expense of *pèbyugale*. Cultivators are however unwilling to give up entirely a crop that has paid them so well in the past. Ever since 1919 20 prices have generally been rather more favourable for the white than for the red bean. The demand for the former is however by no means steady, and the cultivator prefers to grow the red bean which is consumed locally and can therefore be sold readily. Further the red bean is a hardier plant than the white bean and is generally held to give a somewhat larger outturn if grown on similar soils. It is also less liable to deteriorate when stored.

Both red and white millet are grown. The grain of the former is sometimes eaten, but the crop is usually grown for fodder. White millet is grown as a food grain. Between 1908 and 1921 the average area under millet as a food grain was 6,371 acres, as a fodder crop 5,303 acres. With the failure of the paddy crop in recent years there has been a considerable increase in the area under both varieties of millet, but the present tendency is for the area under the fodder crop to exceed the area under the food crop. The chief millet area is the south-west corner of the district adjoining the Lower Chindwin, and it is there that most of the white variety is grown. In this area it is not confined to *ya* land but is sometimes found on the black soil of embanked land, as the rainfall is often insufficient to permit paddy cultivation. Elsewhere millet is usually a fodder crop grown in small patches for the cultivator's own cattle. It is confined to the southern half of the district. Within recent years the *pwinbyu* pest has spread across the Lower Chindwin border into this district, but so far the damage is not very widespread and is kept in check by fallowing and rotation of crops.

The average annual area under cotton in the period 1908–1918 was 2,113 acres. In the year 1918-19 the acreage rose by three hundred per cent. to 7,124 acres, and in 1919-20, 9,357 acres were under cotton. The large increase in these two years was due to the high price obtained for cotton in the two preceding years. With lower prices in more recent years some headway has been lost. The chief cotton areas are in the south-east of Wetlet Township and south-west of Tabayin Township. In these areas it is grown for sale to mills outside the district. Elsewhere it is grown only to a very limited extent and spun at home. The variety

grown is the white Burmese *wagale* which is grown as an annual. In the areas where it is extensively cultivated, cotton usually follows sesamum in the annual rotation, but the area under cotton is much smaller than that under sesamum, as the cultivator grows sesamum for two years in succession if the soil will stand it. Further, millet is an alternative to cotton in the rotation. If the early rains are favourable, millet, which is put down two months later, expands at the expense of cotton. The success of the crop depends less on the quality of the soil than on the fortune of the season. On the better soils and especially on the so-called black cotton soil the plants are inclined to run to wood, and the yield of fibre is diminished.

Wheat.

In recent years efforts have been made by the district authorities to extend the cultivation of wheat by the issue of advances in the shape of seed, but so far results have not been particularly encouraging either in respect of the area brought under the crop or the average outturn obtained per acre. During the four years 1917–20 the average area under wheat was 4,736 acres. During the two succeeding years the average area has dropped to 2,530 acres. This fall may be due partly to unfavourable late rains and the high prices obtained for competing crops, but the poor yield obtained is probably the chief factor that is preventing more rapid extension. The ordinary yield of a successful crop is about six or seven baskets per acre only. These poor outturns are due chiefly to inadequate tillage. To obtain a satisfactory tilth on the heavy *tanè* soils of this district it is necessary to plough and harrow them after each heavy fall of rain throughout the monsoon in preparation for sowing in November. The Shwebo cultivator is however a paddy cultivator, and during this season he is occupied with paddy cultivation. Until transplanting is completed he pays no attention to the preparation of land for wheat cultivation. There is therefore little hope for improvement in wheat outturns as long as the cultivator regards the crop as subsidiary to paddy. Wheat is grown on black soils retentive of moisture, on both embanked and unembanked land. The crop is not irrigated. The chief localities for its cultivation are the Wheat tract adjoining Sagaing District, the kwins on the south-east of Kadu Lake and areas in the Shwebo Canal tract where the water supply is too late to make paddy cultivation remunerative. The heaviest outturns are obtained on alluvial land near the Mu River. The variety of wheat cultivated is macaroni wheat—a bearded wheat.

Groundn

More success has attended the efforts to develop groundnut cultivation. The area under this crop seldom exceeded

a hundred acres until 1916. In that year it rose to 683 acres. It has since expanded annually and in 1922-23 reached 4,034 acres with prospects of further expansion. So far cultivation of the crop has been confined to the loose red sandy soils in the neighbourhood of Paukkan railway station. The stiffer sands are less suitable owing to the difficulty of harvesting the crop. The erect Spanish variety is easier to harvest. Seed has been distributed in considerable quantities in the last two or three years, and groundnut cultivation is now spreading northwards.

her Crops. Gram is a cold weather crop and like wheat and *matpè* is grown on *tanè* soil as a dry crop on embanked land. It is also found on *kaing* land and under these conditions gives very high yields in the neighbourhood of Lethlôk. The wilt-resisting Karachi variety has been introduced in a few localities and will doubtless spread. Plantains occupy over 2,000 acres. Their cultivation as a commercial crop is confined to alluvial land on the east bank of the Mu between Myindaung and Sin-in. They are usually grown on a fairly stiff silt without irrigation. *Pigyan* is practically the only variety cultivated. Better varieties such as *nathabu* and *thihmwe* are grown partly for shade purposes round the betel vine blocks at Thawutti, Lèywa and Mugan. Tomatoes and brinjals are grown on silt soils along the Mu and Irrawaddy. Chillies are found on similar soils, but the area cultivated is under two hundred acres. Maize is grown mixed with *pègya* near Mugan. It is grown principally for the sheath which is sold for cheroot wrappers. The area under tobacco is small—a little over 200 acres. Most of this is grown on island land in the Irrawaddy. Onions are cultivated with irrigation from the Shwebo Canal, with well irrigation, and on impermanent *kaing* land without the assistance of irrigation. Unirrigated onions are grown on island land in the Irrawaddy. Well irrigated onions are confined to the neighbourhood of the Mu River, the most important area being near Magyidaw Village south of Ye-u. In the Shwebo Canal area there has been a considerable increase in the area under onions since 1918, cultivators being attracted by the high profits made by a few immigrants in earlier years. The total area is however still small as cultivation is intensive, the area of one man's plot seldom exceeding an acre. Unfortunately, the supply of water in the Mu River during the dry season is invariably low, and distribution of water for onion irrigation is a matter of some difficulty, as there is a big loss of water in evaporation and seepage. Irrigation would be more satisfactory if cultivators could be induced to concentrate cultivation in areas near watercourse outlets.

In 1920–21 the area under onions was 821 acres—more than double the area for any previous year. Of this area 549 acres were cultivated with the assistance of canal irrigation. Supplies in the Mu were even lower than usual that year with the result that the crop failed in many places owing to inadequate irrigation, and onion cultivation received a distinct setback. It is again making headway however, and cultivators are beginning to realise the importance of making an early start, as irrigation cannot be guaranteed after the end of February. The variety cultivated is that known as *Katta*. It is grown from seed. Near Môk-ogyon sugar-cane has also been grown with the assistance of canal irrigation since 1921. So far the area under the crop has only been about twenty acres. There is little prospect of any large expansion, as the Irrigation Department cannot guarantee a supply of water throughout the hot weather.

Toddy Palms.

At revision settlement (1918–1923) 835,346 mature toddy palms were counted in the district. Of these only 162,562 or less than twenty per cent. were tapped in the settlement year. West of the Mu the most important palm areas are the villages on the boundary between Tazè and Ye-u Townships in the neighbourhood of Ywathitkyi Ywama and the villages lying south-west of the Ye-u Canal in the south-west of Tabayin Township. East of the Mu the jaggery industry is important in villages between Shwebo and Kin-u lying below the Muhaung Canal and in most of the village tracts of Wetlet Township that lie east of the railway line. A comparison with the count made at original settlement (1900–06) shows that, while there has been a substantial increase in the number of palms tapped west of the Mu, there has been a large decrease in most village tracts east of the Mu. In Assessment tract No. 26 in Wetlet Township the number of tapped palms has fallen by 35 per cent. from 48,934 to 31,877. The reasons usually advanced for the decrease are that the palms have grown too old to climb or that the old toddy climbers have died. It is true palms are seldom planted nowadays, but in groves they spring up by natural reproduction. The real reason for the decrease probably is that an easier livelihood can now be earned by other methods. The work of the toddy climber is exacting. It is performed at the hottest season of the year, and during the tapping season the climber has no leisure, as the yield is affected if the shoots are not dressed every day. On the other hand there is a keen demand for labour in the canal area, and the younger generation prefers to seek well-paid employment there. Whether the same result will follow the introduction of irrigation and railroad communication in

Ye-u Subdivision it is difficult to forecast. There the population is denser and appears to be increasing more rapidly, so that all available means of livelihood may have to be retained.

The number of palms tapped by an individual climber varies greatly, but the toddy climber who combines the jaggery industry with agriculture, as most do, usually climbs about 25 male palms and 15 female palms. The male palms are tapped in February and March, the female palms between April and June. The average yield per palm, so far as it can be estimated, is about 13 viss, which at present prices is worth between Rs. 3·4 and Rs. 4. The climber has little actual out-of-pocket expenditure except on bamboos and on pots for collecting the juice and for boiling. The traditional tools cost little and last a long time. He has however to spend considerable time and labour on collecting and carting fuel, the average value of which is about Rs. 12 or Rs. 15 per climber. The proportion of tapped palms that are climbed by tenants is 52 per cent. and the usual rent one viss of jaggery per tree. Sometimes the owner pays the tree revenue, sometimes the tenant.

Soils. The typical soil of the central plain is a heavy clay usually black but sometimes lighter in colour known as *tanè*. The district probably contains the most extensive tract of this soil in the whole province. When wet it is so sticky that its cultivation imposes a very severe strain on both man and beast. When dry it contracts and is split by cracks a couple of inches wide into blocks one or two feet in diameter. It absorbs an enormous quantity of water before it reaches the stage of holding up water on the surface to permit of puddling. It is this that delays the spreading of canal water in years in which there has been no early rain to seal up the cracks. But this has its compensation. *Tanè* soil is very retentive of moisture, and therefore can withstand longer periods of drought than most other soils. It is this also that renders it suitable for the cultivation of winter crops such as *matpè*, gram and wheat. On the other hand *tanè* has very serious drawbacks as a paddy soil. First and foremost it is very heavy to work. Wet harrowing proceeds at about half the speed attained in lighter soils. The result is that, whereas the sands and loams receive seven or eight harrowings, *tanè* soil usually gets only three or four. A further defect is that seedlings must be transplanted early in the season, otherwise they do not tiller and yields are poor. This characteristic of *tanè* has an important bearing on canal irrigation in this district, as it is just at this critical season that supplies in the Mu River

are usually less reliable than at any other period during the monsoon.

Tanè is by no means a soil of uniform quality. The best type of *tanè* produces as high outturns as any soil in the district, while the worst types under existing methods of cultivation are as infertile under paddy as any soil could be. The chief distinction made among *tanè* soils is one of texture. The better soils are smooth-*tanènu*. The poor soils are coarse-*tanègyan*. The latter when wet are much stickier than the former and on drying crack with wider fissures. The most fertile *tanè* is a mixture of *tanè* and silt known as *tanè-non*. This soil under irrigation gives the highest yield over wide areas of all soils in the district. It is found chiefly in the Shwebo and Ye-u Canal areas in the tracts adjoining the Mu River. It is a soil of comparatively recent formation and should perhaps be classed among the loams. *Tanèputchi* carries a small proportion of fine gravelly substances. This soil yields fairly well for the first five or six years after the jungle is cleared. The outturns in subsequent years are indifferent. As compared with *tanègyan* soil it has the advantage that it is not quite so heavy to work, and in irrigated areas water spreads over it more rapidly than over *tanègyan*. As regards outturns it can be just as poor as unmitigated *tanègyan*. *Tanèkyaukthwin* is an infertile *tanè* containing sharp-edged pieces of gravel about half an inch in diameter. *Tanèkyat* is a mixture of *tanè* and white clay, which has not the usual capacity of *tanè* soils for retaining moisture. It is probably the worst of the *tanè* soils.

The sandy soil that is most widely distributed is not a pure sand but a mixture of sand and clay known as *thèkyat*. In the dry weather it bakes very hard without cracking, and when struck with a hoe gives out a ringing metallic sound. It is an infertile soil, but responds immediately to an application of manure. Its merit as a paddy soil is that it is able to hold up water on the surface and so to permit cultivation after a short sharp shower that would be absorbed by better soils. Evaporation is rapid however, and crops in this soil cannot withstand prolonged drought. Outturns are less affected by late planting than on *tanè*, so that, whereas the early and middle rains are most important on *tanè* soils, the best results on sandy soils are usually obtained when the middle and late rains are satisfactory. *Thèkyat* occurs everywhere on the higher levels outside the central *tanè* basin. It is probably the remains of spurs from the sandstone hills that fringe the eastern and western limits of the district.

The loams are the most satisfactory paddy soils. They are the easiest to work and give the best outturns. Probably the best is a light loam known as *thè-non*, a mixture of silt and sand usually found where streams have shifted their course or overtopped their banks. *Thè-on-net* is a dark loam that retains moisture and yields well. The areas under the better soils are however limited, and regarded as a whole the paddy soils of the district are poor.

For dry crops, the soil most highly esteemed is the light silt along the banks of the Mu and Irrawaddy. Along both banks of the Mu, especially in its lower course, behind this narrow strip of light silt there is a wider strip of alluvial soil darker in colour and coarser in texture than the more recent silt close to the river. This soil, though not quite so easy to work, grows the same crops as the inundated land and over a series of years is not very much less productive. Near the Sipadôn and other streams there are also areas of alluvial land under dry crops, but the silt is coarser and less fertile than the Mu silt. Elsewhere the most frequent soils under dry cultivation are stiff sands and sandy loams. These are usually cultivated with sesamum alternating in the south of the district with millet and cotton. The presence of clay near the surface is the usual defect in these soils. The type of sandy soil known as *thèpok*—a very fine grained sand—resists drought better. In the south-east of the district there is a red loam covered with loose sand in which groundnut cultivation is now making rapid headway. Black soil under dry crops occurs chiefly in the Wheat tract on the Sagaing border and in the south-west of Tabayin Township. In the former area the soil is the pure moisture retaining *tanè* which grows wheat and gram. In the latter area it is a much drier soil, and millet is the typical crop grown on it.

In *mogaung* paddy areas there has been no perceptible change in soil fertility. Large areas are fallowed every year, and the crops taken from fields more regularly cultivated are often light and do not therefore exhaust the soil. Holdings are small and the number of herd cattle fairly large, so that cattle manure is usually available in sufficient quantities to maintain soil fertility. On the other hand in the Shwebo Canal area, which has been under irrigation for some seventeen years, there is evidence of deterioration of soil over considerable areas. Comparison of crop reaping statistics at original and revision settlement suggests that yields have decreased, but owing to the different methods of crop selection employed and the substitution of a lower yielding variety of paddy this evidence is not conclusive.

A comparison of crops on land recently cleared and on similar land cultivated for ten years or over however confirms the view that there has been deterioration. Most of the black soils except *tanè-nôn* deteriorate after five or six years working. There does not appear to be any appreciable decline in subsequent years. If the land is to be cropped annually and maintain its fertility, manure must be applied. But with the extension of cultivation in canal areas there are now no facilities for cattle breeding. Supplies of cattle manure are smaller and the area worked by each cultivator is larger than under *mogaung* conditions. The result is that in the absence of manuring there has been a considerable drop in fertility, particularly in kwins distant from villages. While this deterioration has been going on, there has also been very considerable improvement of soil due to the top dressing of silt received by fields in the vicinity of water-courses and pipes. On light sandy soils this admixture of silt has been invaluable. On the more common *tanè* soils it has had less effect.

Methods of cultivation: (i) Paddy

Over the greater part of the district paddy cultivation follows normal lines. Seed is kept apart from the general stock to avoid overheating, but there is not much selection of seed, though different varieties are kept distinct. The careful cultivator will however often select a well matured field and thresh it separately for seed. For both nurseries and fields to be planted the harrow (*tun*) with movable teeth is the usual implement of cultivation. The *tè*, or plough with iron tipped share is used only where there is a luxuriant growth of grass or weeds, or where several years of fallowing have permitted tufts of coarse grass to grow up. The harrow used everywhere in this district is much smaller and lighter than that in use in Lower Burma, and it is the invariable practice of the ploughman to stand on the beam supporting himself by the handle (*tun kaing*.) Ordinarily only three or four teeth are inserted, though there are sockets for seven, the full number being used only in the final harrowing of nurseries. The number of *sats* or harrowings performed depends on the nature of the soil, the energy of the cultivator, the capacity of his cattle and the time at his disposal. When a satisfactory tilth has been obtained, the surface is levelled in preparation for transplanting by means of the *kyandôn*, a long beam attached to the harrow teeth.

Seedlings are transplanted when they are six weeks old, but the capricious rainfall of the *mogaung* tracts often makes it necessary for the cultivator to take advantage of a fall of rain and plant when the seedlings are much younger or

again the seedlings may be more than two months old before there is sufficient rain for the preparation of the fields to be planted. The seedlings in the nursery are plucked by men. Ploughing is finished by eleven o'clock, and, when seedlings have to be uprooted, the work is usually done after the morning meal by the ploughman who may be either the cultivator himself or his hired labourer. Assistance is often received from friends, but casual labour is also hired in many cases. The seedlings are tied up into bundles called *pyosi*. The bundle is the unit of payment and varies in size not only from place to place but also in the same village, the bundles tied by hired labour being smaller than those tied by the cultivator himself or by *letsa* or mutual help labour.

Transplanting is done entirely by women. Four or five seedlings are usually planted in one clump. More are put in if the transplants are small, fewer if they are big. Ordinarily a woman plants about a fifth of an acre a day, but the area varies with the character of the soil and the custom of the village as to working hours. The poorer sands and clays require close planting.

In the coarse *tanègyan* soil of the central basin of the Ye-u Canal area and on similar land south of Tazè there is a very considerable area on which transplanting is seldom practised. In these areas the density of population is very low, and there is not sufficient cattle power or man power for the ordinary process of puddling and transplanting. The ground is harrowed when it is damp after the early rains, and the seed broadcasted. Subsequently weeding by hand is sometimes done. Harrowing under these conditions proceeds at more than three times the pace of wet harrowing, while there is also a saving on plucking and transplanting labour and a reduction in seed used, provided a second sowing is not required. Yields are inferior to those obtained from transplanted paddy, but until a larger population is attracted to these areas the present methods will probably continue. In addition to the areas in which it is practised as a normal course, this method is also employed elsewhere in seasons in which seedlings are not available owing to the failure of the early and middle rains. When he judges that it is too late to put down a nursery, or that there is not likely to be sufficient water for wet harrowing, the cultivator frequently harrows dry and broadcasts. He cannot hope for much success under these conditions on soils other than *tanè* and silt.

Harvest begins about the third week in November in *mogaung* areas. It is nearly three weeks later in the

southern end of the Shwebo canal area. In the north of the district it is usually over soon after the end of December. In the south it is not completed until the middle of January or later. Men, women and children all take part. The area reaped by an adult naturally depends on the weight of the crop, but it is usually about a fifth or a sixth of an acre a day. In canal areas the ears are often cut off short, and the straw reaped separately and bound in sheaves. Straw so reaped can be more readily chopped and fed to stock than straw which has been trampled on the threshing floor. Near Shwebo it has a sale value, but elsewhere cultivators ordinarily permit straw to be reaped by outsiders free of charge. In years of poor rainfall this is a concession of some value to owners of cattle in *mogaung* tracts who have reaped no crop of their own.

After reaping the grain is trodden out by cattle in the usual fashion. Threshing floors are almost invariably situated in the village, either in the cultivator's compound or on vacant land just outside the village fence. Indeed the village is the base from which all the operations of agriculture are usually conducted. As a result of the fragmentation of holdings one man generally works five or six different holdings probably situated in three or four *kwins*. There is therefore little to be gained by living in a *tè* on any one of his holdings. In *kwins* brought under cultivation within the last twenty years by canal irrigation there has been little subdivision of holdings. These *kwins* are usually distant from the village, and communications are difficult owing to the sticky *tanè* soil. In such areas cultivators do frequently live during the cultivating season in field huts situated on their holdings. The land benefits from their presence, but the practice is hardly likely to extend, as the cultivator usually prefers the amenities of village life.

There are two methods of winnowing the grain after threshing. The best results are obtained from shaking up the grain in a tray (*sagaw*) and so separating out the chaff. This is a slow and laborious process, however, and is usually left to women. The more common practice known as *sagaw waing* is for one man to throw the grain on to a heap, a trayful at a time, while four or five others drive out the chaff by fanning it with trays as it falls. The custom varies from village to village, and buyers are usually prepared to pay more for the grain in villages where the first method is followed.

(ii) Dry Crops.

For the cultivation of dry crops the plough (*tè*) is in more common use than in paddy cultivation. It is always

used in the heavier soils and not infrequently in the lighter loams. On the former the ground is usually broken with the plough and a tilth worked up by alternate harrowing and ploughing after every heavy fall of rain. In the important *ya* tract in the south-west corner of the district however the plough is little used. As a general rule, for crops that are planted early such as cotton and groundnut less work is required in preparing the soil than for late crops such as sesamum, millet and beans. On the other hand the early crops need more attention in the shape of weeding during the period of their growth. Early sesamum is broadcasted in May and reaped in September and October. Late sesamum, which is the chief sesamum crop, is sown in September and reaped at the end of December and beginning of January. Where there is rotation of crops, it is the first crop in the series after fallowing, and if manure is applied, it is to the sesamum crop that it is given. Cotton is broadcasted in June and picked at the end of October and beginning of November. It is weeded twice, once when the plants are about six inches high and again when about eighteen inches. The bolls are picked on four or five different occasions. For a successful crop good early rains are essential, while heavy rain late in the season after the bolls have formed destroys the crop. Millet is usually sown in August and reaped in January. It receives no attention during the period of growth. It is generally grown as a fodder crop, and the seed is therefore broadcasted closely. Groundnut is sown from the end of May until the middle of July. It is occasionally broadcasted, but the more common practice now is to sow in a furrow and cover the seeds by dragging the *kyandôn* over the field. Two hoeings are required during the growth of the plant, once when it is about six inches in diameter and again when it has spread to about twelve inches. The plants are uprooted by hand about the beginning of November. Unless there has been rain to soften the soil, this is a difficult business, and many of the pods are left behind in the stiffer soils. Women are employed to pick the pods from the plants. For the cultivation of the red bean and white bean the soil is harrowed and ploughed early in the rains. This is repeated towards the end of the rains, and the seed is sown about the middle of October. Broadcasting is practised in some areas, but sowing in rows, which facilitates both weeding and harvesting, is more common. Harvesting takes place in February or March, being later on inundated land than on land free from inundation. *Pègyi*—the broad white bean—is the first bean to be sown and the last

to be harvested. It is usually sown broadcast mixed with late sesamum. Harvesting takes place in March and April. Only the pods are picked, and cattle are grazed on the plants. *Sadawpè*, the common pea, is always broadcasted. It is sown later than *pègya* and reaped earlier. *Pènauk* and *matpè*, though they are also grown on unembanked land, are usually found on paddy land on which water has been received too late for paddy cultivation. On embanked land the soil is puddled in September and October as for rice cultivation. Water is kept standing in the field until the beginning of November. It is then allowed to drain off, and a harrow with three teeth is dragged across the field to level it and assist drainage. The seed is broadcasted a few hours later at the rate of about a *pyi* to the acre. The whole plant is plucked up during February and March and like the other bean crops is threshed by cattle treading it out. Gram when grown on embanked land is cultivated in a somewhat similar fashion, but the seed is not sown immediately after the water has been drained from the field. The cultivator waits for about a fortnight until the soil begins to dry. He then ploughs and after sowing covers the seed by harrowing.

A full account of land tenures in the district will be found in Chapter II (*f*) of the Report on the Original Settlement of Shwebo District (1900–06). At original settlement, out of a total occupied area of 982,221 acres, 150,737 acres or fifteen per cent. were declared State land. The land is for the most part in the hands of peasant proprietors, who cultivate on an average twelve acres each in unirrigated tracts and seventeen acres in irrigated tracts. Owing to the high proportion of fallow land in the former area, the average area occupied is considerably in excess of the average area cultivated and is probably no lower than in canal tracts. The proportion of large estates is small. According to figures supplied by the Land Records Department there are only 99 estates in the district exceeding 100 acres in extent. These cover 12,006 acres under full ownership and 5,635 acres under usufructuary mortgage, or a total of 1·6 per cent. of the occupied area of the district. The biggest estate is that recently formed by the purchases of Sir A. Jamal. The only large landlords residing outside the district are Sir A. Jamal and U Po Tha, C.I.E., who purchased land in the Shwebo Canal area in the early days of irrigation. In their sales to these two buyers the Shwebo cultivators seized the opportunity to unload some of their poorest land on the outsider. The proportion of land held by non-agriculturists is small, but

Land Tenure

it shows a tendency to increase as the result of money-lending transactions. In 1909-10 the percentage of the total occupied area held by non-agriculturists was 4·14 per cent. In 1915-16 it was 4·42 per cent. and in 1921-22 it had risen to 5·14 per cent. The only part of the district where non-agriculturists hold any considerable share of the land is in the vicinity of Shwebo. In Shwbo Canal tract No. 30-A, which is confined to a radius of 7 miles from Shwebo, it was found in 1921-22 that 64 per cent. of the area let to tenants, or 25 per cent. of the cultivated area, was owned or held under usufructuary mortgage by non-agriculturists. Much of this was in their hands however long before the introduction of irrigation. At the revision settlement of 1918–23, 94 per cent. of the *thathameda*-paying households were examined as to their status. Of households owning or cultivating land six per cent did not cultivate the land they owned. Fifty-eight per cent. worked only their own land. Twenty-one per cent. rented land in addition to working land of their own, while only fifteen per cent. were landless tenants. Some of the non-cultivating landowners are rice millers and money lenders residing in the towns. Others are cultivators, while many are village money lenders themselves usually of agricultural stock.

s. The area let to tenants at rents other than privileged rents at revision settlement (1918–23) was 42,422 acres or 14 per cent. of the occupied area of the district. In *mo-gaung* tracts the area rented amounted to 11 per cent. of the occupied area and 20 per cent. of the cultivated area. In irrigated tracts the proportion of land let to tenants was somewhat higher, the percentages of occupied and cultivated area being 18 and 24 respectively. There are no statistics from which it can be determined whether the area worked by tenants is increasing or not. The Land Records Department has hitherto recorded statistics only for fixed produce and fixed cash tenancies, which form only an insignificant percentage of the whole in this district. Comparison with the original settlement statistics is also useless as these included privileged rents. The probability is that there has been some increase in land worked by tenants in irrigated tracts, partly owing to the transfer of land to non-agriculturists, but mainly owing to irrigation having increased the area that can be regularly worked, cultivating owners thus finding that they have more land than they can conveniently work.

Four types of tenancies are found in the district—share produce, partnership, fixed produce and fixed cash. Half the rented area is let on share produce terms. The prevail-

ing fractions of the gross produce taken as rent are a half, a third, a fourth and a fifth, but the most common share is a third. On *ya* land and in the thinly-populated tracts in the north of the district a fifth is the usual share. A share as high as a half is seldom taken outside the Shwebo Canal area, and there the owner usually pays the whole revenue if he receives a half of the produce. Ordinarily the practice is for owner and tenant to join in paying the revenue in the same proportion as they share in the produce. Partnership tenancies cover 31 per cent. of the rented area. Under this system the owner shares in the cost of cultivation, pays half the revenue and receives half the total produce as rent. In most cases, however, his contribution to the cost of cultivation is restricted to supplying seed. The rent under this system ordinarily works out higher than under the share produce system. Partnership rents are most common in the fully occupied and densely populated tracts in the centre of Ye-u Subdivision and on the most favourably situated land in the Shwebo and Ye-u Canal areas. Fixed cash tenancies are unimportant, occupying only one per cent. of the rented area. The area let at fixed produce rents amounts only to 17 per cent. of the rented area, but this form of tenancy is becoming more common in the Shwebo Canal tract and now covers a third of the rented area there. Fixed rents are preferred by absentee landlords, as it relieves them from the necessity of seeing that they get their full share of the produce. The practice is however even more common when landlord and tenant are relatives. Poor land is often let on a fixed produce basis known as *myo win* or *myo ta bo*. In the former case the rent charged is the amount of paddy the land requires for seed, roughly a basket per acre, in the latter case twice that amount. Under the fixed produce system the tenant usually agrees to pay the revenue.

Land is almost invariably let on annual leases. At revision settlement (1918–23) it was found that 22 per cent. of the rented area had been in the hands of the present tenant for five years or more, 7 per cent. for four years, 14 per cent. for three years, 19 per cent. for two years and 38 per cent. for only one year. Annual leases on share produce terms undoubtedly make for indifferent husbandry, but neither landlords nor tenants appear to be anxious to bind themselves for longer periods.

Tenants are naturally not so well off as cultivators who have no rent to pay. In the more densely-populated areas the proportion of their outturn that they have to deliver as rent is high. On the other hand the demand is elastic, as

it varies with the yield. The fraction of the produce paid as rent is usually fixed by custom, and one rarely hears of a tenant being turned out, in order that the landlord may install another man who is prepared to pay a higher fraction. Throughout the district the tenant's standard of living is somewhat lower than that of the peasant proprietor. In *mogaung* tracts, where all are poor, degrees of poverty are hardly noticed. In the Shwebo Canal area, where there is more wealth, the class distinction between tenants and cultivating owners is more pronounced. The former are often poorly housed. They save on their labour bill, by engaging a smaller proportion of hired labour, and after harvest they cannot afford the leisure the majority of small owners enjoy at this season, but are compelled to supplement their income by engaging in non-agricultural occupations.

abourers. The Shwebo cultivator does not hire labour for the performance of work that can be done by himself or his family. Ploughmen are hired only when the holding is too big for the male members of the family, and in some areas it is by no means unusual to see women ploughing. In *mogaung* areas, where the area worked by each cultivator is usually small, the hiring of ploughmen is less common than in irrigated tracts, where the bulk of the land (especially in the Shwebo Canal area) is worked by two yoke and three yoke men. For the operations which have to be completed within a limited time, *viz.*, plucking seedlings, transplanting and reaping, the labour of the cultivator and his family is insufficient, and outside assistance must be obtained. In *mogaung* areas, the *letsa* or mutual help system still furnishes the bulk of this labour. But mutual help labour has often to be supplemented by hired labour, and not infrequently women are hired as whole time *sayinhngas*, in order that their employers may obtain the assistance of a mutual help group by allowing them to work for the other members of the group. In addition to working in the fields these women are also employed as domestic servants in husking rice and drawing water. In irrigated tracts on the other hand, especially in the Shwebo Canal area, the bulk of the work is done by hired casual labourers. In all canal-area villages a proportion of the permanent population belongs to this class, and during the planting and reaping season their numbers are swelled by men, women and children who troop in from adjoining *mogaung* tracts in search of employment.

Wages are paid partly in cash, partly in kind. Seasonal labourers, *sayinhngas*, are paid in kind at harvest. Casual

labour for plucking seedlings and planting is paid for in cash at the close of the day's work. Harvesters employed by the day are usually paid in kind when the crop has been threshed. In all cases meals are provided by the employer. Rates of wages are not uniform throughout the district. They are generally higher in the Shwebo Subdivision than elsewhere They are highest in the Shwebo Canal area where the demand for labour is strongest.

There are two seasons for which seasonal labourers are hired. The first, the ploughing season, is a full four months period lasting from June until September. The second, the harvest season, is a shorter period of about three months from the middle of November to the middle of February. Labourers are occasionally engaged for the whole period, June to February, but that is exceptional. For the ploughing season the normal wage is 40 baskets of paddy in addition to board and lodging. A foreman may occasionally get as much as 50 baskets, while lads with little experience receive only 30. For the harvest period the average man receives about 35 baskets. In unirrigated tracts the rates of wages are lower by about five or ten baskets. In the Shwebo Canal area the cost of the labourer's board is about Rs. 7 per mensem, elsewhere Rs. 5 or Rs 6. For plucking seedlings the normal rate is four annas per hundred bundles together with two meals, if the labourer works the whole day. The number of bundles plucked in a day is not constant, but a skilful man can easily pluck two hundred of the small size bundles and so earn eight annas in addition to two meals. In the Shwebo canal areas women are paid for transplanting at the rate of four annas each per day. Two meals and a mid-day snack are also given. In *mogaung* tracts wages are lower, the normal rate being a rupee a day for six persons with meals. For reaping the usual rate is half a basket of paddy a day with two meals. During one or two recent years cultivators in canal areas have been able to cut down the rate to a third of a basket owing to the high price of paddy and the abundance of labour resulting from the failure of crops in unirrigated tracts.

In the last fifteen years there has been very little increase in the rates of wages paid in kind. There has however been a very considerable increase in wages paid in cash. Thus, in the Shwebo Canal area, the rate for plucking seedlings has risen from a rupee for 600 bundles to a rupee for 400 bundles. In 1910 the normal rate for transplanting was six women for a rupee, four annas a head being paid only when there was a pressure of work. Now four annas

a head is the normal rate, while a bribe has to be given to the leader to secure the services of the gang when the demand for labour exceeds the supply. In addition to the rise in wages paid in cash, there has been, owing to the increase in the cost of living, a marked increase in the value of the food supplied to labourers as part of their remuneration. Over the greater part of the district this increase in value has not meant for the labourer any great improvement in the quality or quantity of the food supplied. In canal irrigated areas, however, labourers, especially casual labourers, during the planting season, have been able to secure a marked improvement in the meals supplied to them. The reason for this is that daily wages are ordinarily fixed by custom and are seldom the result of individual bargaining. When labour is scarce, competition for it takes the shape of supplying it with better food than one's neighbours supply. An employer who was foolish enough to attempt to economise in this direction would find it extraordinarily difficult to secure labour when next he required it.

The remuneration of the agricultural labourer is adequate during the period for which he is employed, and would support him in reasonable comfort if he could earn similar wages throughout the year. As elsewhere in the province, however, the difficulty is that his employment is seasonal. The majority of agricultural labourers find other employment during the hot weather months, but there are always gaps during which they are unemployed and earning nothing.

nd lues.

Statistics of land values in the district are not easy to interpret. Cultivators are ordinarily unwilling to part with their land by outright sale unless it has some serious defect, and transfers are usually effected by usufructuary mortgage. The amount for which any particular piece of land is mortgaged does not, however, necessarily represent the full mortgage value of the land, as the mortgagor usually hopes to be able to redeem his land in the future and does not desire to make his task too difficult. It is only when he or his successors in interest find this is beyond their capacity that further sums are borrowed up to the full value of the property.

The average sale value of land in the district has risen from Rs. 34 per acre in 1912-13 to Rs. 44 per acre in the years of the revision settlement 1918-19 to 1922-23, the greater part of the increase having taken place since 1917-18. In the areas irrigated by the two major canals the average sale value ascertained at revision settlement

was only Rs. 39 per acre. The low sale value of land in this district and other canal irrigated districts in Upper Burma has been commented on in Land Revenue Administration Reports. In view of the small area to which sale transactions relate the statistics of sale value are apt to be misleading, but the low sale value of irrigated land in this district can be accounted for. In the first place irrigation has effected a large increase in the area available for cultivation in canal tracts. Population has also increased, but there is as yet no such pressure of population as has forced up land values in some of the unirrigated tracts in the west of the district. Again much of the irrigated land yields only indifferent crops. Cultivation charges and irrigation rates are high, so that land of this description is not such an attractive investment as might at first appear. Nevertheless anyone who set out to acquire land in the Shwebo Canal area by outright purchase would find that he would now (1923) have to pay from Rs. 75 to Rs. 100 or over per acre for good land, Rs. 40 to Rs. 75 for medium land and Rs. 25 to Rs. 40 for inferior land.

The average mortgage value of land mortgaged with possession was found to be Rs. 28 per acre at revision settlement. Land irrigated by the old Mu Canal has an average mortgage value of Rs. 36 per acre, land irrigated by the major canals Rs. 35, *mogaung* paddy land Rs. 27 and *ya* land Rs. 20. There are, however, wide variations in mortgage value from place to place, depending as much on pressure of population as on soil fertility. Thus, in the thinly-populated northern tracts the average mortgage value is under Rs. 25 per acre, whereas in the densely populated areas in the west of Ye-u Subdivision, in spite of a lower rainfall and greater insecurity of crops, the average mortgage value varies from Rs. 39 to Rs. 44 per acre. The values quoted are the average mortgage values of all extant usufructuary mortgages. As in the case of sale value there has been a substantial increase of 32 per cent. in the average mortgage value of land mortgaged between 1912-13 and the period 1918-23, the rise having taken place mainly since 1917-18.

Non-usufructuary mortgages are uncommon except in the vicinity of Shwebo Town.

Agricultural indebtedness.

At revision settlement (1918-23) out of 63,179 agricultural households examined 27 per cent were found to be in debt at the time of the inquiry. At original settlement (1900-06) the proportion of households indebted in *mogaung* tracts was 38 *per cent.* and the average debt Rs. 48. At revision settlement 23 *per cent.* of households

were found to be in debt with an average debt of Rs. 61 per household indebted. In irrigated tracts 35 *per cent.* admitted indebtedness at revision settlement with an average debt of Rs. 123. The statistics, so far as they go, indicate a decrease in the prevalence of debt and a slight increase in its incidence on the households indebted, but in inquiries of this sort there must always be a number of people who find it more convenient to deny the existence of debts than to admit them. In addition to outstanding debts for which statistics have been quoted, there is also, especially in the Shwebo Canal area, a very large volume of temporary indebtedness which had been settled by the time the enquiry was made. This temporary indebtedness almost invariably takes the form of forward sales or *sabape* advances. In the Shwebo Canal area in 1921-22 it was found that 43 *per cent.* of cultivators sold part of their produce before it was reaped. The average proportion of their outturn sold in advance by these persons was 46 *per cent.* and the average cash advance received Rs. 120 In many cases these temporary loans are rendered necessary by misfortune of some sort or another, while the annual outgoings for cultivation expenses are much higher in irrigated than in unirrigated tracts. There can be no doubt, however, but that a very considerable proportion of this temporary indebtedness is due not to necessity but to sheer force of habit and want of forethought. The borrowers have utilised the improvement in their credit resulting from security of crops to live six months ahead of their income.

The majority of loans are taken in cash, though there is a considerable number of small loans in paddy, especially in unirrigated tracts. Produce loans are repayable in produce, the usual interest charged being five baskets of paddy for every ten baskets borrowed. Cash loans are repayable in three ways, both principal and interest in cash, principal in cash and interest in kind, or both principal and interest in kind. The first method of repayment is the most frequent. Excluding interest-free loans, the ordinary rate of cash interest varies from 6¾ per cent. to 60 *per cent.* per annum. At revision settlement it was found that 51 *per cent.* of the loans paid interest at rates under 18 *per cent.* As loans at rates as low as this can be obtained only from Co-operative Societies and from Government, this figure shows the important part played by these two agencies in financing agriculture in the district. For small loans made by money-lenders the most common rate of interest is 60 per cent. On larger loans with reasonably

good security the normal rate of interest is 30 *per cent.* For loans with principal repayable in cash and interest in kind (*saba nyun*) the normal rate of interest is now 30 or 40 baskets of paddy per annum for every hundred rupees borrowed. The rate at which advance sales of paddy are made depends on two factors, the date of the transaction and the buyer's estimate of the market price of the new crop. During the last two years (1921-23) the normal rate has been about Rs. 90 per 100 standard baskets for advances taken early in the rains rising to Rs. 110 for advances taken in November and December. These rates may be compared with an actual market value of Rs. 150 or Rs 160 at the time of delivery in February. The interest on transactions of this sort works out at a rate higher than for any other type of loan. The prevalence of this form of borrowing is one of the worst features of the agricultural economy of the canal areas. The borrowers realise that they are paying a very high rate of interest for the accommodation received. On the other hand they find that credit can be obtained much more readily on *sabape* terms than on any other.

There are four chetty firms in Shwebo, but very few cultivators are financed by them directly, though many of the traders, who make *sabape* advances to cultivators, work on capital borrowed from the chetties. Most of the money borrowed by agriculturists other than interest-free loans from friends and loans from Co-operative Societies and Government is obtained from well-to-do members of their own community, who combine money-lending and paddy-trading with agriculture.

Co-operative Societies

If the prevalence of the system of *sabape* advances is an unsatisfactory feature of the agricultural economy of irrigated tracts, the extent to which agriculture throughout the district as a whole is financed by Co-operative Societies is undoubtedly satisfactory. From the commencement of the movement Shwebo has always been a stronghold of co-operation, and to this date it has a larger number of agricultural societies and members than any other district in Burma, though their operations are on a smaller scale than those of most Lower Burma societies. In 1921-22 there were 506 agricultural credit societies in the district organised in 50 Unions with a total working capital of over 14½ lakhs. Loans issued during the year amounted to Rs. 2,89,894, while the total loans due by members amounted to Rs. 11,20,591 or an average debt of Rs. 98 for each member. The societies have 11,491 members, and it is estimated that approximately 20 *per cent.* of the heads

of agricultural households are co-operators. The present distribution of societies is as follows :—Shwebo Township (40), Kin-u Township (79), Wetlet Township (14), Kanbalu Township (76), Kyunhla Township (32), Ye-u Township (64), Tabayin Township (116) and Tazè Township (80). The movement has made least headway in Wetlet Township, the reason possibly being that honest and efficient leaders have not been forthcoming. It may be noted that there is more crime, drunkenness and gambling in this township than in any other part of the district, and that in the irrigated portion of the township husbandry is often slovenly.

Primary societies are managed by a chairman and committee with a secretary who is paid a very small salary. The Unions also have each a chairman, vice-chairman and committee with a secretary who is paid a small sum. There is also a District Agricultural and Co-operative Association the object of which is to assist registered co-operative institutions, and promote the interests of agriculture and industries in the district. In addition to the credit societies there are also 12 production and sale societies and 123 cattle insurance societies. These societies however are not so popular as the credit societies. In a district where cattle mortality is ordinarily low, there is little incentive to cattle insurance.

The Government-paid staff employed in connection with the co-operative movement in the district consists of :—(*a*) one Assistant Registrar for Shwebo and Northern Burma (Katha, Bhamo and Myitkyina) with headquarters at Mandalay, (*b*) one Junior Assistant Registrar for administration for Shwebo and Northern Burma with headquarters at Mandalay, (*c*) two Junior Assistant Registrars for super-audit with headquarters at Shwebo. The society-paid staff consists of :—(*a*) one Auditor employed as liquidator, (*b*) six Auditors for auditing work, one of whom is partly employed in Katha District, (*c*) six Union Supervisors for teaching societies co-operative principles and accountancy.

After several initial difficulties a District Central Co-operative Bank was opened in 1923 to finance agricultural and other co-operative societies in the district. Whether it will succeed in attracting deposits or not remains to be seen. The co-operative movement has been of the greatest service in increasing credit facilities in a district over the greater part of which agricultural credit is restricted owing to the uncertainty of the crops. The one criticism to which it is possibly open is that it has not yet succeeded in instilling habits of thrift in its members.

In addition to the cheap money furnished by Co-operative Societies substantial sums at a still lower rate of interest are issued annually to cultivators by Government under the provisions of the Agriculturists' Loans Act for the purchase of seed and cattle. For the five years 1918—22 the average amount lent each year has been Rs. 98,914. In the year 1921-22 following on a bad season a sum of Rs. 1,67,300 was issued in advances. The loans are popular owing to the very low rate of interest charged, 6¼ per cent., and there are no complaints from borrowers of inconvenience caused by the formalities attending their issue. In recent years a considerable number of loans have been issued in the shape of wheat seed purchased from the Agricultural Department. This method of disposal is sound and might be extended to erect varieties of groundnut, Karachi gram and short-lived varieties of rice. Long-term loans under the Land Improvement Loans Act have not hitherto been issued, but a beginning is now being made with loans for repairs to tanks. **Agricultural Loans.**

The table below shows the stock recorded in 1907-08 and in 1921-22 :— **Cattle.**

			1907-08	1921-22
Bulls and Bullocks	Oxen	...	132,115	165,585
	Buffaloes	...	7,946	7,209
Cows	Oxen	...	115,456	93,114
	Buffaloes	...	8,300	9,445
Young stock	Oxen	...	70,605	62,388
	Buffaloes	...	5,769	5,473
		Total	340,191	343,214

Oxen outnumber buffaloes by 15 to 1. Lack of water and suitable grazing is the chief reason for the low proportion of buffaloes. In the north-east and north-west of the district, where jungle is plentiful, the proportion of buffaloes is very much higher. In spite of its poor grazing facilities the Shwebo Canal main tract shows the fairly high proportion of one plough buffalo to seven plough oxen, but apart from the grazing difficulty oxen are the hardier and better all purpose animals and are therefore preferred by the ordinary cultivator.

Cattle are bred throughout the district, but the extension of cultivation in canal irrigated tracts has curtailed breeding in these areas. The statistics quoted show that, while the number of bulls and bullocks in the district has increased by twenty-five per cent. in the last fifteen years, the number of cows and young stock has decreased by about twenty per cent This decrease is confined to the canal irrigated tracts. The district is however still able

to produce all the cattle required for its cultivation, and there is a small surplus exported annually. The chief exporting area for oxen is in the south of the district. Buffaloes are exported to Lower Burma from the neighbourhood of Myedu in the north of the district, but some of these animals are bred in the adjoining district of Katha.

The herd cattle are allowed to fend for themselves. Plough cattle are stall fed and receive sesamum oil cake, bran, bean trash, chopped millet stalks and straw. When the paddy crop is on the ground they are grazed on *kazins* or grass is reaped for them. There are only four grazing grounds in the district, but outside canal areas and the closely occupied tracts in the centre of Ye-u Subdivision there is usually plenty of waste or fallow land.

The price of cattle has risen considerably in the last five years. A good bullock now (1923) costs about Rs. 110 as against Rs. 75 six or seven years ago. The average animal is valued at about Rs. 75 or Rs. 80, and many of the poorer cultivators have to be content with cattle worth only Rs. 40 or Rs. 50.

There are sporadic cases of anthrax and foot and mouth disease in some part of the district in most years, but the district is as a rule free from serious outbreaks of contagious disease. There was one bad outbreak of rinderpest in 1911-12 when 2,237 cattle died, and another in 1920-21 when 6,352 succumbed. Cultivators recognise the value of preventive inoculation, and 8,447 head of cattle were injected with anti-rinderpest serum during the last outbreak.

ther ock.

Shwebo is not an important pony-breeding district. Between 1908 and 1923 the number of ponies in the district has increased from 2,680 to 3,871, but they are almost invariably undersized and of poor quality. Such good animals as there are have usually been bred outside the district.

Sheep and goats are bred only by natives of India. The number of sheep has increased threefold in the last three years, and in the present year (1922-23) is 11,182. They are grazed on the high land east of the railway in the rains and in the Shwebo Canal area after the crops are off the ground. Goats number only 2,410 and are increasing much more slowly.

The number of pigs has remained stationary since registration began in 1915, and is now 12,451. Pig-breeding is mainly confined to *Bayingyi* villages and to a few villages east of Kin-u.

rigation : lajor anals.

The district is fortunate in being watered by the two largest major canals in the Province, the Shwebo Canal

and the Ye-u Canal, which take off from common headworks on the Mu at Kabo and irrigate the whole of the central plain on either bank of the Mu. The headworks consist of a stone weir surmounted by wooden shutters. At either end there are large span openings, four on the Shwebo side, two on the Ye-u side, fitted with patent sluice gates, which are ordinarily kept closed, but can be quickly opened when the river rises in flood. Water is admitted to the canals by means of head regulators immediately above the sluice gates.

The Shwebo main canal is 28·68 miles long from the headworks to the bifurcation, three miles west of Shwebo, and is designed to carry 2,624 cusecs discharge. At the bifurcation (Okshitkan) the canal divides into two branches, the Hladaw branch canal, 25·4 miles long, on the west and the Môksogyôn branch, 21·73 miles long, on the east. Near the Sagaing border the Hladaw branch tails into the Paukma stream which flows into Thazin Lake in Sagaing District. The water from the tail of the Môksôgyon branch drains into the Kadu lake in the south of this district, and thence finds its ways into the Thazin lake. Leading from the main canal and its branches there are 19 distributaries with an aggregate length of 154 miles, while 52 minors with an aggregate length of 121 miles assist further in distribution. The channels which carry the water on to the *kwins* are known as watercourses and ordinarily take off from distributaries and minors. There is however a considerable area irrigated from direct pipes in canals, distributaries and minors. East of the main canal only a few acres are irrigated. All distributaries lead off to the west. South of the bifurcation however the land on both banks of the branch canals is commanded, and distributaries lead off from either bank. Cross drainage from the east is passed across the canal and its branches by syphons and super-passages. There are usually short drainage cuts leading from these into natural drainage channels, but beyond passing flood water across the canal and its distributaries little has yet been done to improve the drainage within the canal area. The construction of the canal was begun in 1900-01 on an estimate amounting to Rs. 48,04,093. In 1908 a revised estimate was prepared for Rs. 53,70,532. The canal was opened for irrigation in 1906-07, and the construction estimate closed on 31st March 1911, up to which time the total capital outlay on the project including indirect charges amounted to Rs. 56,18,636. Up to 1921 the total capital outlay, direct and indirect, was Rs. 61,13,549. At the time of writing detailed plans and estimates are

Shwebo canal.

being worked out for the remodelling of the canal. The object in view is to modify the slope of the main canal and most of the distributaries. The present slope is now regarded as too steep and leads to scouring of the bed and side slopes when full supplies are sent down. By the construction of new falls and alterations in bed widths the main canal and its distributaries will be regarded so as to secure better command of the area to be irrigated and at the same time get rid of the scouring action. In addition one big new distributary and several new minors are to be constructed. It is estimated that 20,000 acres at present unirrigated will be brought under irrigation. The chief advantage, however, will be, that land which can now be irrigated only when full supplies are sent down, will be able to receive water when only half supplies are available. The preliminary estimate for this remodelling amounts to fifteen lakhs. The area classified at revision settlement as irrigable by the canal is 200,811 acres, excluding 7,710 acres in Sagaing District. The area actually irrigated each year varies with the supply of water in the Mu River available for irrigation, with the price of rice and with the character of the season in *mogaung* tracts. In years in which full supplies are available early in the season the area under cultivation tends to increase. The price of rice is also an important factor, as there are considerable areas where the soil is so poor or the irrigation so untimely and unreliable that there is no profit in rice cultivation except when prices are high. Even in 1921-22, when prices were high, out of the total occupied irrigable area of 200,811 acres 27,839 acres were fallowed and 6,270 acres were under dry crops. The prospect of a poor season in *mogaung* tracts usually improves the labour supply in the canal area and thereby helps to increase the area under cultivation. On the other hand, in years when rainfall is poor the canal water is slow in spreading. Between 1912-13 and 1922-23 the average area irrigated and assessed annually has been 152,059 acres. This is the nett irrigated area, and excludes the area on which remission is granted on account of crop failure. Excluding a few hundred acres under onions and some twenty acres under sugar-cane, rice is the only crop to which irrigation is applied. The year 1913-14 was the record year with 161,795 acres. During the war years, following on the drop in paddy prices, there was a fall in the area annually irrigated, but since 1921-22 the nett irrigated area has again risen to the neighbourhood of 160,000 acres and but for heavy remissions would have exceeded the 1913-14 record.

The average annual revenue credited to the Irrigation Department between 1912-13 and 1922-23 has been Water Rate Rs. 6,37,304, Share of Land Revenue Rs. 1,37,814, Total Irrigation Credit Rs. 7,75,118. This after deducting working expenses has given an annual return of approximately eight per cent. on the capital outlay. The percentage of the whole revenue credited to General Administration has however been small, amounting only to 6·29 annas per acre, while the *thathameda* rate in canal area villages has been Rs. 2 per household as compared with a rate of Rs. 4 over the bulk of the rest of the district. Taking these facts into consideration, the direct return to the state on the capital outlay has not been high, but other indirect sources of revenue must have benefitted from the increased purchasing power of residents in the canal area.

Ye-u can[al] The Ye-u canal is a smaller work than the Shwebo canal. At present it irrigates an area less than half that irrigated by the latter. When the work is completed it is expected that the area irrigated by it will be rather over five-eighths of that now irrigated by the Shwebo Canal. The Ye-u Main Canal is 42 miles long. For the first six miles of its course there is no commanded area. Thereafter the land east of the canal is irrigated. Irrigation west of the canal is impossible, as the country slopes fairly steeply from west to east. The eastern portion of the canal area is irrigated by the Mayagan branch canal, 18 miles long, which takes off from the main canal about half way down its course near Hnawgôn, and irrigates the land lying between the Mu River and the Payanpaga *chaung*, the central drainage channel of the Ye-u Canal area. There are altogether 37 distributaries with a total length of 153 miles, and 27 minors aggregating 40 miles. The construction of the canal was begun in 1911, but progress was retarded during the war owing to the absence of irrigation officers on military service. Work was however sufficiently far advanced by 1918 for irrigation to begin in the 1918-19 season. Since then the bulk of the distributaries and minors have been completed. A few distributaries are still incomplete, and five minors have not yet been constructed. In the north of the canal area the water-course system is fairly complete, but little has been done in the south so far. Altogether about a third of the water-courses have still to be dug. In 1918-19, the year in which the canal was opened for irrigation, 33,453 acres were irrigated. Since then the irrigated area has increased steadily except in the abnormally unfavourable season 1920-21. In 1922-23 the area irrigated and assessed was 61,810 acres. The area actually

irrigated and matured was however 77,452 acres, the difference being due to initial exemptions and remissions on account of crop failure. At revision settlement the area classified as irrigable was 106,283 acres, but this area will extend as distributaries and water-courses are completed. The area which it is estimated will be irrigated annually when the project is complete is 109,112 acres, a small portion of which is situated in the Lower Chindwin District.

Up to the end of 1920-21 the total capital expenditure direct and indirect on the canal was Rs. 50,97,929. It is estimated that the total capital expenditure when the project is complete will be Rs. 59,23,859, though this may be exceeded. In addition there are very heavy charges for accrued interest amounting at present to over twelve lakhs, due partly to the delay in the construction of the canal and partly to the low water rates applied in the early years of irrigation. Water rate collections have risen from Rs. 66,886 in 1918-19, when the canal was opened, to Rs. 1,37,865 in 1922-23; but even the latter sum is insufficient to meet the annual working expenses, and leaves nothing for the payment of interest on the capital cost. The water rates have hitherto been very low, and no share of land revenue has been credited to irrigation. Under the rates proposed at revision settlement the credit to the canal will be increased by 95 per cent., but even with this enhanced credit it is doubtful whether the project will prove directly remunerative, as the assessment has had to be pitched low over the whole of the centre of the area where the soil is extremely unproductive under rice. The canal however is a great boon to the residents of the area irrigated by it, and, as their wealth increases, the State will benefit indirectly from other sources of revenue to which they or persons trading with them contribute.

Minor works.

The only minor irrigation works now maintained by Government are the Muhaung or Old Mu Canal and the Mahananda Tank. The Muhaung canal is believed to have been originally constructed under the orders of Alaungsithu of the Anawrata dynasty in the 12th century A.D. It extends from a point on the Mu opposite Wetto Village, about 30 miles north of the head-works of the modern canals, to the Halin Lake. For the greater part of its length it lies a short distance to the east of the Mu Valley Railway. Originally it is thought there was a stone weir across the Mu at the head of the canal, but probably this did not last long. U Aungzeya, when he became king, had the canal repaired, and built the Mahanada Tank a mile north of Shwebo Town to secure a water-supply for his capital. The

lake was formed by building a large embankment across the course of the canal, the spill water being carried round to the east of the original alignment of the canal, which it joined again farther south. In the reign of Mindôn Min, who also owed his throne to his Shwebo followers, the canal was once more put into working order under the personal superintendence of the *Einshemin* and the Myadaung *Mingyi*. Another attempt was made to erect a weir across the Mu at the head of the canal, this time with timber, but the effort was again unsuccessful. It is probable that a certain amount of water at one time entered the canal from the Mu, but the outlet silted up long ago, and the canal must always have depended mainly on the supplies it received from the drainage of the high country to the east. The canal is of the *ta-pet-sè* type, *i.e.*, it has only one bank which catches the run-off from the east, and distributes it through pipes to the land lying to the west. North of the Zigôn-Tantabin Road it has been breached by the Hngetka, the Teinyin and the Indaw streams and irrigates very limited areas. South of Shwebo it irrigates only a small area where it tails into the Halin lake. Between the Zigôn-Tantabin Road and the Mahananda it is maintained by the Irrigation Department for a length of about 28 miles, and irrigates the land lying between it and the Shwebo Canal. The chief sources of water supply are the Ketlon *chaung*, the Mawya *chaung*, the spill water from the Pindin tank, and Thanbo *chaung*. The Kobin *chaung* flows directly into the Mahananda Tank. The irrigation is however very unreliable, as it depends entirely on the rainfall in the high country to the east.

At revision settlement the total area classified as irrigable by the canal and the Mahananda Tank, which constitutes one continuous work, was 18,084 acres. For the period 1907-08—1922-23 the average area irrigated and assessed was 8,200 acres, but the statistics for 1920-21, when only 658 acres were irrigated, show how unreliable the work is in a season of unfavourable rainfall. Expenditure incurred by the Irrigation Department has been confined to the construction of masonry outlets,—there are altogether thirteen of these,—the maintenance of the bund, the construction of masonry escapes to reduce the risk of breaching and repairs to breaches, which are still fairly frequent owing to the silting of the bed and the rottenness of the core of the bund which consists largely of the trunks of toddy palms. There is a proposal to remodel the canal and build a weir across the Mu at its head near Kinywa. It is very doubtful whether this work would prove

remunerative. The supply of water in the Mu River is at present inadequate for the existing major canals, which have to take water in rotation when the river is low. There would of course be sufficient water for all three canals when the river is full, but at critical periods it would be inadequate. Either the Muhaung Canal would have to be closed at such times or the percentage of crop failure in the Shwebo and Ye-u Canal areas would increase.

gation blish- t.

The staff employed in the Shwebo Canal Division is as follows:—1 Executive Engineer, 3 Subdivisional Officers, 17 Subordinates, 1 Canal Revenue Assistant, 4 Canal Inspectors, 29 Canal Surveyors, 87 Weir Mates and Weir Labourers, 1 Accountant, 14 Clerks, 7 Draftsmen and Tracers and 31 Durwans, Peons and Dak runners. The minor works, the Muhaung Canal and Mahananda Tank, fall within the Shwebo Canal Division in addition to the Shwebo Canal.

The Ye-u Canal Division establishment consists of 1 Executive Engineer, 2 Subdivisional Officers, 14 Subordinates, 1 Canal Revenue Assistant, 3 Canal Inspectors, 19 Canal Surveyors, 28 Weir Mates and Weir Labourers, 1 Accountant, 13 Clerks, 5 Draftsmen and Tracers and 11 Peons and Durwans. The headquarters of the Executive Engineer is in Shwebo.

rate gation rks.

There is a multitude of small private irrigation works throughout the district, varying in importance from tanks that in favourable seasons can irrigate four or five hundred acres to one holding tanks and bunds across streams that serve merely to divert the drainage on to the adjoining fields. All are dependent on local rainfall, and the irrigation they afford is accordingly most precarious. Though they cannot assure a matured crop in unfavourable seasons, they are of considerable value in ordinary years. Bunds across streams enable the cultivator to make the most of what rainfall there is, while tanks help the fields below them to tide over longer periods of drought than crops on unassisted land can endure.

ks.

Tank irrigation is confined almost entirely to the east of the Mu River, and the chief tank irrigated area lies east of the Muhaung Canal between Kin-u and Tantabin. The principal tanks are:—Mogyobyit, Yônbin, Gwe-aik, Padaing, Wayônsu and Aingya in Kanbalu Township; Pindin, Kanthaya, Gyolan, Piduaing, Chinbyitkyin and Ywatha in Kin-u Township; Singut, Gyogya and Tagantha in Shwebo Township; Tazè and Letsè in Tazè Township. Most of these tanks were at one time maintained by Government. Some were given up on the recommendation of the original settlement officer, and the remainder were handed over to

the villagers in 1909 and 1912, the rates of assessment being assimilated at the same time to those for unirrigated land.

In addition to these there are a number of large tanks in the area now irrigated by the Shwebo and Ye-u Canals. In the Shwebo Canal area the most important are the Palaing, Kywèzin, Yinba, Pinzin-Hladaw and Kadu Tanks, in the Ye-u canal area the Tabayin and Mayagan Tanks. With the introduction of irrigation these large tanks became superflous, and efforts were made to drain them and make their beds available for cultivation by cutting the bunds. A considerable measure of success has been achieved, but where the bed of the tank is low-lying, as in the case of the Kadu Tank and Hladaw Tank, flooding is severe and cultivation precarious. There is at present a promising scheme for again utilising the Kadu Tank as a storage reservoir and irrigating land to the south now unirrigated.

Sand-weir

West of the Mu reliance is placed mainly on irrigation from the streams that flow into the central *tanè* basin. The most important are the Seinnan, Sipadôn, and Sawmè *chaungs*, but there is a large number of smaller streams that are also utilised. All these streams flow in shallow sandy beds, and their waters are diverted into irrigation channels by means of sand weirs constructed diagonally up-stream. The sand-weirs are scraped together by means of harrows at the beginning of the rains, and never extend more than half way across stream. In this way the pressure on the weir is reduced, but it is invariably carried away by a big rise and has then to be reconstructed. Small rises which can be withstood by the sand weirs are the most satisfactory for this type of irrigation, but the chief drawback to the system is the absence of rises of any sort.

Wells.

Well irrigation is restricted to valuable crops such as betel-vine and onions and is confined to the tracts bordering on the Mu River. The total area cultivated with well irrigation is under 200 acres.

Lift irrigation.

Spring rice is grown with the assistance of lift irrigation on the margins of tanks, particularly in the Kadu Tank and Halin *jheel*. Water lying in the *Mudeins* or depressions formed by old channels of the Mu River is similarly utilised. The *kanwe* or scoop suspended from a tripod is the usual implement employed in lift irrigation, but there are also a few mechanical water lifts consisting of a series of slats on an endless belt working in a trough and revolved by manual labour. The total area cultivated with lift irrigation is however ordinarily small and seldom exceeds a thousand acres.

CHAPTER V.

FORESTS AND MINERALS.

Forests.

The greater portion of Shwebo District falls within the Mu and Shwebo Forest Divisions. These two Divisions cover the whole of the Mu drainage and therefore include parts of Katha District. That part of the Shwebo District which lies west of the Mu Chindwin watershed falls within the Lower Chindwin Forest Division.

orest clad areas.

The chief forest areas lie along the perimeter of the Mu drainage. On the east the Minwun ridge is covered with dense forest on both its eastern and western slopes from the Kôngyi and Kodaung reserves, opposite Thabeikkyin, northwards into Katha District. In Katha District this ridge runs west of Tigyaing and crosses to the railway north of Kin. It is joined by the long spur of the Maing-thon hills which divide the Mu from its main tributary the Daungyu *chaung*.

In the west forests cover the Mu-Chindwin watershed from Saingbyin northwards up the western edge of Ye-u Subdivision and Kyunhla Township into Katha District.

Between these main hill forest areas the country is covered with *indaing* of varying quality wherever it has not come under cultivation.

The total area of reserved forests in the district is given as 985 square miles of which 857 square miles fall within the Mu and Shwebo Forest Division boundaries. These two divisions also control 470 square miles of reserved forest in Katha District. The area of unclassed forests in the district is about 1,000 square miles.

lu and hwebo ivisions: ypes of orest.

The area under forest in the Mu and Shwebo Divisions may be classified into three types, (i) Indaing and Scrub, (ii) Evergreen, and (iii) Teak-bearing.

(i) *Indaing and Scrub*—This includes the whole of Ye-u and Shwebo Subdivisions and the flat portions of Kanbalu Sub-division and parts of Katha District.

The prevailing species are:—

In	... Dipterocarpus tuberculatus.
Thitya	... Shorea obtusa.
Ingyin	... Pentacme suavis.
Thitsi	... Melanorrhoea usitata.
Taukkyan	Terminalia tomentosa.
Thin	... Terminalia Oliveri.
Cutch	... Acacia Catechu.
Padauk	... Pterocarpus macrocarpus.
Hnaw	... Adina cordifolia.

Padauk and *Hnaw* are not typical *indaing* species but are found where the forest is merging into type (iii). The only bamboo over the area is *Myinwa* ... Dendrocalamus strictus.

(ii) *Evergreen.*—This is found only in the Maingthon hills in Katha District. It includes *Nyaung* (Ficus) species—

Laukya ... Schima wallichii,
Zinbyun ... Dillenia (Species),
Wetshaw ... Sterculia colorata.
Thitsein ... Terminalia belerica,

and also several *Zagat* (Quercus) species.

The bamboo species are:—

Wabo ... Dendrocalamus, (Not the big *Wabo* of Lower Burma).
Waka ... Pseudostachyum polymorphum,
Thaik .. Bambusa burmanica.

(iii) *Teak bearing.*—This type covers the bulk of the reserves, that is the forests of Kanbalu, Kawlin and Kyunhla Townships. The chief species are:—

Teak ... Tectona grandis.
Pyinkado ... Xylia dolabriformis.
Hnaw ... Adina cordifolia.
Padauk ... Pterocarpus macrocarpus.
Taukkyan... Terminalia tomentosa.
Yemane ... Gmelina arborea.

The bamboos are chiefly:—

Tinwa ... Cephalostachyum pergracile.
Myinwa ... Dendrocalamus strictus.
Thaikwa ... Bambusa burmanica (a little).

In Wuntho and Pinlebu Townships, *i.e.*, the lower slopes of the Maingthon, *Kanyin* (Dipterocarpus turbinatus) occurs mixed with the teak.

History of the Division

The old Mu Division was formed on Ist July 1887 and was part of the old Upper Burma Circle with Mr. J. Murray as the first Divisional Officer. The Headquarters were at Ye-u and were only moved to Shwebo in 1897. In 1910 the lower part of the Mu drainage which lies in Sagaing District was made over to the Lower Chindwin Division, and the Division then remained unchanged until in April 1922 it was split into the Shwebo Division, east of Mu and south of the Daungyu *chaung* and the Mu Division, west of Mu and north of the Daungyu *chaung*.

The old records show intrepid forest officers advancing with pickets and guards of Military Police to the girdling

areas in Wuntho and Pinlèbu Townships where the Wuntho Sawbwa still held away.

The growth of work and revenue in the last 30 years may be judged from the budget figures :—

	1892-93.	1922-23.
	Rs.	Rs.
Expenditure ...	38,000	3,49,525
Revenue ...	75,000	8,00,411

The revenue for the past five years has been:

Year.	Major produce			Minor produce.	Miscellaneous sources	Total.
	B.B.T. C. teak	Licenses.	Government.			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1918-19 ...	75,211	1,78,003	73,163	13,564	5,720	3,45,661
1919-20 ...	1,01,388	1,85,293	1,57,877	16,114	8,185	4,68,857
1920-21 ...	55,688	2,75,181	1,98,514	12,249	9,895	5,51,527
1921-22 ...	80,636	3,68,260	1,40,041	8,226	10,726	6,07,889
1922-23 ...	1,37,380	3,16,609	3,23,213	12,938	10,271	8,00,411

Under the head of major produce the Bombay Burma Trading Corporation's figure is fairly constant, their outturn being 6,000 to 8,000 logs a year. The revenue from licenses has more than doubled since pre-war days. This is due to the heavy demand for timber for munitions and the post-war demand for sleepers by the Indian Railways. The bulk of the revenue comes from sleepers of ***Taukkyan*** and ***Thitya-ingyin***. These woods were not used for sleepers before the war. Recently, owing to the extreme scarcity of *Pyinkado* outside reserved areas, the railways have been forced to experiment with other species. In recent years timber has also been extracted by contractors working for Government.

The revenue under minor produce is chiefly from *Padauk* naves, teak spokes and felloes, bamboos, *thitsi* (resin oil) and a little lac from Wuntho. The *Indwe-pwenyet* monopoly also yields a revenue of about Rs. 5,000 a year.

Method of extraction.

A few traders cart their timber to the railway line, but the bulk of the timber, that is, that extracted by the Bombay Burma Trading Corporation, is put into the Mu and floated down to Myinmu on the Irrawaddy, where it is measured for royalty. The canal headworks at Kabo have not improved the Mu as a floating stream, and the resultant stranding of logs below the headworks has started a thriving local trade in illicit sawpits.

Other species.

Species other than teak are worked by local traders with licenses in unclassed forests, mainly for conversion into sleepers. Until recently the procedure was a prepaid license, a rush for the best bit of forest known, small sawpits for conversion at stump and the collecting of royalty on the converted sleepers delivered to the railway. As may be imagined this has led to enormous waste in the past. It is hoped that the recent adoption of a system of allotment of beats, revenue marking at stump before conversion and a restriction on the number of sawpits allowed will improve matters.

Sawmills.

Until 1920 there was only one mill in the Division situated at Kodaungbo, but in recent years saw mills have been erected at Shwebo(2), Yindaik, Kyunhla, Zigôn, Tantabin(2) Kabo and Pintha. Two enterprising traders Maung Htwa and Azizullah, tempted by improved forest roads, have started portable jungle mills on 10-year licenses in the Thaw Reserve.

Departmental expenditure.

In the past funds for expenditure on roads were very limited, Rs. 160 per mile for construction and Rs. 5 per mile for repairs being considered adequate. The division was consequently very badly off for roads and paths until more liberal provision was made for the opening up of forests by improved communications. The present expenditure on roads is from forty to fifty thousand rupees a year as against Rs 4,359 in 1914 and Rs. 1,255 in 1904, and it is now possible to work forests quite inaccessible even in 1916.

The expenditure on buildings was Rs. 3,100 in 1904 and Rs. 3,359 in 1914. There is now a sanctioned building scheme for Rs. 12,000 a year in each division, and the subordinate staff is gradually being adequately housed.

Management.

Reservation is nowhere complete, large areas in Pinlebu and Kyunhla townships still requiring investigation. There are no working plans in existence, the richness and accessibility of the unclassed forests and the comparative inaccessibility of the reserves having in the past led to reserves being closed areas. Now, however, that roads are being constructed a start has been made with

interim schemes introducing the new system of concentrated regeneration.

Forest villages. The new policy of including in the reserves any villages existing at the time of reservation coupled with the establishment of villages on deserted sites in existing reserves has led to considerable progress in this direction.

There are now three main groups of forest villages, the Kansalaga group, the Thaw group and the Baw group. In the Kansalaga group (Katha) the reservation of Nanhlaing and Hmangin Reserves has been used to induce the existing population of Kadus, who live by *ya* cutting, to stay on and cut and plant *yas* systematically under departmental control. The villagers are compensated for the extra work by remission of taxes, free produce and a scale of rewsrds for successful plantations. As these men are born *ya* cutters, the scheme is working well. In the case of the Thaw group however it was possible to get villagers only by offering them old deserted village sites and permanent fields in addition to *ya* work, and the satisfactory handling of these pseudo-Shans has still to be worked out. In the Baw tract there is a further group of old established villages now under forest control, and these people are maintained more as a labour supply than with a view to *ya* cutting. All the villagers in this and the Thaw group appear to be debased Shans, very lazy and very independent. In the old days the Baw tract is said to have been fairly densely populated (it is still in police circles described as a savage barbarian tract inhabited principally by dacoits). Being off the beaten track, it was a place of refuge both from the troubles of the annexation and prior to that, from the King's tax collectors. Maung Kya, *ex*-dacoit-*bo* and Myothugyi could no doubt tell many tales of the good old days, when there was no railway, no Forest Department and villages contained 50 and 100 houses, where now they have only 5 and 6. At that time the only markets were on the Irrawaddy and there are still signs of the old trade routes. A large ruined tank at Yegan and an old zayat site mark a track from Pangonda to Kyetkaing, and another such old Sawbwa's road runs from Baw to Kayainsatgôn. Apparently in those days the Baw tract people managed to get carts out of their valley on to the Minwun ridge and there on market days met the coolies who had climbed the steep three miles from the river. There are also old village sites on the ridge itself such as Metkingu at the source of the Thaw and a wonderful teak log weighing over two tons, the *pyathat* of an old monastery at Ubyegyi (2,800).

Two Keddah operations were started in the district by Karens in 1920, one in Kyunhla and one in Kanbalu township, but neither has been very successful so far, the percentage of deaths among the captures being high. The method used is the long narrow Karen keddah wide enough for one, or at most two, elephants and capable of holding 20 to 40. Keddahs.

The western tracts of Ye-u Subdivision west of the Mu Chindwin watershed are in the Lower Chindwin Forest Division. These forests, known as the Hnaw forests, though greatly damaged by reckless felling and burning, still contain valuable *in* (dipterocarpus tuberculatus), *ingyin* (pentacme suavis) and *thitya* (shorea obtusa). There is one reserved forest, the Aik Reserve, covering an area of 128 square miles. The only revenue is a few hundred rupees from *Thitsi*. Lower Chindwin District.

The salt industry gives employment to a large number of persons in the south of the district. The two chief centres, Halingyi and Thakuttaw were visited very recently by Mr. F.W. Walker, Assistant Superintendent, Geological Survey of India. The following are extracts from his report (Report on a visit to some salt workings in the Shwebo and Sagaing Districts 1923):— Salt.

"The geological features of the areas in which the salt wells occur are similar. A large alluvial plain through which the Mu River runs, extends from the hill range on the west bank of the Irrawaddy to the range which runs parallel to and about three miles to the west of the Mu River. All the wells visited are situated in this alluvial plain. Along the western edge of the hill range which forms the eastern boundary of the alluvium is a narrow belt of tertiary deposits which overlie gneissic rocks of Archaean age. The western boundary of the alluvium is again tertiary beds, which form the hill range between the Chindwin and Mu Rivers. It is thus reasonable to suppose that these tertiary beds continue under the alluvium. The tertiary beds of Burma are believed to have been deposited under basinal conditions. When evaporation took place we should have salts deposited around the edges or, if the concentration was sufficient, layers of salts would be deposited on the bottom. Apparently the concentration did not develop sufficiently as no definite layer of gypsum or salts have been found up to the present."

"I am of the opinion that the tertiary beds are the origin of the salts found in these districts. The salts which these beds contain would be dissolved out and taken into solution by underground waters, which exist almost universally, and these in places would find conditions suitable for rising to

the surface. The rainfall in this area, it may be noted is about 30 inches. Between Thakuttaw and Halin there are numerous small mud vents, which seem to indicate a fault line in the beds beneath, and it is highly probable that the brines rise to the surface along such lines. The alluvium itself is very porous and would offer little resistance to percolating waters. This is seen in wells which have not been lagged. No borings or wells have been sunk deep enough to enable one to form any estimate of the depth of the alluvium. As to the possible existence of a salt stratum I found no evidence in support of it. Judging from the known outcropping tertiary beds, in which no trace of a salt stratum has up to the present been found, I think it highly improbable that one exists here. Considerable quantities of salt are undoubtedly obtained, but there is no necessity for a salt stratum to exist as their source. They can easily be obtained from the salts which the tertiary beds are known to contain."

"I append a list of analyses of brines, products, and of sea water for comparison. From these the variable composition of the brine is seen :—

(a) Brines.

—	Halin hot springs.	Thakuttaw.	Bay of Bengal.
(1)	(2)	(3)	(4)
Sodium chloride ...	0·68	1·636	2·606
Magnesium chloride ...	0·02	...	0·281
Potassium chloride ...	...	...	0·120
Magnesium sulphate ...	...	0·227	0·182
Calcium sulphate ...	0·01	0·168	0·136
Calcium chloride ...	0·09	...	...
Sodium sulphate ...	...	...	...
Organic matter ...	Trace	0·001	...
Insoluble inorganic matter	Trace	0·017	...
Ferric oxide and alumina.	Trace	0·006	...
Water	99·20	97·945	96·675

(*b*) *Products.*

— (1)	Halin. (2)	Sea water (boiled), (3)
Sodium chloride ...	76·57	96·90
Magnesinm chloride ...	0·46	...
Magnesium sulphate ...	...	0·06
Calcium sulphate ...	1·71	1·05
Calcium chloride ..	3·26	...
Sodium sulphate ...	...	...
Organic matter	Trace	...
Insoluble inorganic matter ...	0·09	0·08
Ferric oxide and alumina ...	0·17	0·09
Water	17·64	1·82

None of the brines in salinity approach that of sea-water."

Lignitic coal is found near Letkôkpin, five miles north-north-west of Kabwet on the Irrawaddy, but its extraction has not proved profitable as it is of poor quality. The seam in one area is said to be six feet thick with a dip of 39°. Coal.

Analyses by the Geological Survey of India are as follows :—

	Letkôkpin.	Kyetsubin.
Moisture	11·94	12·60
Volatile matter	37·68	37·22
Fixed carbon	36·22	41·72
Ash	14·16	8·46

The coal is said to have been discovered in the reign of Mindôn Min, who ordered excavation. "Work was started in the dry weather by digging a big hole of oblong shape, about 60 feet in length and about 40 feet in breadth. Coal was found at a depth of about 15 feet and digging was continued to a depth of 25 feet. The King had an idea of burning the coal in his steamer in place of the timber fuel then in use, and advanced money for the excavation; but the ministers and other officials who had the handling of such money helped themselves to most of it and very little reached the workmen. The coal was carried in small baskets, woven for the purpose, on a pole between two men who had to

ascend and descend steps dug in the side of the hole. From the pit's mouth coal was taken to Kabwet in solid wheeled carts, the only kind then in existence. The labour was forced from the surrounding villages. Work was carried on till the rains when the pit was filled by rain water and by the flooding of the surrounding country, after which it became impossible."

Mr. Oldham, Government Geologist, visited the area in 1855 and leaves the following account (see Appendix to Yule's Mission on Ava):—

"From the small village of Thingadhau, on the western bank of the river, I visited the coal mines in that neighbourhood, to see which was the great object of my trip."

"Coal is known to occur at three (3) separate localities, all lying westwards of the Irawadi, at distances varying from five to seven miles from it. The most southerly of these localities is near to the small village of Tembiung (Thin baung). From Thingadhau, the road leads southwards, along the ridge parallel to the river, as far as the parallel of Pohbiu (Pobyu) village, whence it turns to east, passing through an unbroken jungle, open, and of small timber (the enbeng prevailing), on a sandy soil, through which, here and there, great massive beds of sandstone protrude. Close to the Irawadi, the prevalent character of the rocks is clayey, bluish, green silty beds predominating; but, more inland, the prevalent character is sandy, few earthy beds occurring. Near the river, also, the dip is, on the whole, to the east, while farther inland it is to the west. The country is, however, so covered, that it is impossible to trace the point of change. Near the village of Tembiung, a stream of some size is passed, which, preserving a north and south course, falls into the Irawadi close to Kibiung; and about one mile and a half west of Tembiung, in a small water-course which is a feeder of the Kibiung stream, the coal was found. It crops out in the bank for about fifty yards, and is again seen at a little distance in the continuation of the same strike, and obviously the same beds. With its associated beds, it dips to west 30°, south at 15°. The coal rests upon blackish-blue clunchy slate, or shale (one foot) blue-gray clunchy and sandy clay, with a few imperfect impressions of leaves and stems (three feet); similar rocks, blackish and more regularly laminated, or shaly (one to two feet); blue-gray clunchy clay (two feet six inches) passing downward into reddish, hard, ferruginous clunch. Close to the outcrop of the coal on the east, comes the edge of an immense spread of greenstone, of the same general character as that seen in the bank of the Irawadi opposite to Kibiung;

and the occurrence of this is accompanied by a roll over, or twist, in the beds associated with the coal. The immediate junction is, however, concealed."

"The bed, which has been called coal, is altogether four feet thick, but this is the thickness from top to bottom of the *black* beds. In this, closer examination shows that the top is composed of six inches of smut, or powdery, coal-like matter; then come nine inches of blackish clay, with thin, threadlike seams of coal; below this, the rest of the bed (two feet nine inches) is coaly; but the best layers are confined to about one foot three inches at the bottom of the bed."

"From this bed a considerable amount of coal had been raised, and large portion of this still remained on the bank of the little stream, crumbling rapidly to powder from exposure. Some had been sent down to Amarapoora, and some we had seen on the banks of the Irawadi, at Kibiung. This had been, I believe, all raised with a view to its sale within the British territory in Pegu, but it was found unremunerative. The coal is of blazing character; burning freely and rapidly with good blaze but with considerable ash (twenty-seven, per cent). It is in structure quite flaky, and is, besides, split up by very numerous joints and cracks, which divide the masses into small pieces, and tend to make the coal rapidly disintegrate into fine slack. This defect was very striking in the portions which had been raised, and the men who had worked at it complained much of its brittleness, and of the difficulty of getting it out in lumps, and of the large proportion which broke up so small, that they had to leave it behind in the mine."

"I am satisfied that, while such is undoubtedly the character of the bed, much of the mischief was due to the wretched tools with which they worked, and the unskilful manner in which the excavation was made. The tools they used were the ordinary wood-cutting axe, and their grubbers or spades, consisting of a kind of large chisel inserted in a wooden handle. With these, it was scarcely possible to avoid breaking up the coal into slack. But the brittleness and tendency to break up into small lumps are quite sufficiently obvious to prevent this coal from ever being economical for any lengthened transport. For many purposes within moderate distances of the mine, it will prove an useful and capital fuel."

"The second locality in which coal has been discovered in this district is about five miles more to the north, and along the upper waters of the Kibiung stream. It lies about five miles westward of the village of Thingadhau, and is

exposed in the banks of the watercourse generally dry, but down which after rain, a considerable torrent rushes."

"The coal-bed, including in this (as in the other case) the immediately associated layers of blackish coaly shale, etc., is five feet six inches thick. It rests upon bluish clunchy and sandy clays, under which occur clean white sandstones, with intercalated beds of bluish black sub-micaceous silts thinly laminated. Thick soft sandstones, passing downwards into harder micaceous and sub-calcareous beds, underly these. This sand stone is of considerable thickness, varying slightly in coarseness and in texture, and also in tint, from pinkish red to a pure clean white. Under this sandstone come ferruginous silty beds, which, on exposure, become very red on the joints and fissures. The coal itself is very flaky and woody in structure. In the sandstone false-bedding is frequent and well-marked. The whole group dips with tolerable regularity to the west, at 5° to 8°. The mass of the black "coal bed" is earthy and impure, but thin layer like masses of rich, glossy, conchoidal jet are found in these earthy layers. The surface of these jetty portions, when partially decomposed, presents on the small scale a beautifully columnar structure. In the coal, in small imbedded pieces and in thin stringy layers, occurs a rich amber coloured gum or resin, easily burning with a blaze. It occurs also in another very interesting form, in minute strings or fibres, passing through and along, and filling up the small interstices in the fibrous or woody structure of the jet. This gives to the mass, from the peculiar contrast of the rich yellow tint of this ambery gum, with the black jetty coal, a very rich silky-looking texture. The whole is eminently of lignite aspect and character, and the peculiar arrangement and disposition of these ambery-looking masses point at once to their being the juices which have exuded from the masses of wood, the decomposition of which has been one great source of the formation of this coal. About 100 yards to the north the same bed is seen a little back from the stream, holding, its average thickness as before."

"The third locality in which coal is found lies about eight miles north-west of Thingadhau village. It lies in a district, the drainage of which is to the north and east, not to the south a small dividing swell or ridge separating it from the other localities to the south. The road leading to it, or rather the jungle path, passes over a peculiar broken and irregular country, formed of soft, easily decomposing sandstone, which break up readily into irregular ravines and hollows, giving a surface over which it would be exceedingly difficult to form a good road."

"The coal has been exposed in a great open space in the jungle of bare sand, resulting from the disintegration of the soft sandstone, in which a few irregular patchy layers of ferruginous pebbly beds occur, which stand up boldly, not yielding to atmospheric action, as do the clean sandstone enveloping them. The coal is exposed for about 200 yards, close to and in the bank of a small mountain-torrent bed, now quite dry. This is called the Manda Kyoung. (Hmantha) or stream, and is said to enter the Irawadi close to the village of Yethaya, above Thingadhau. The thick sandstones seen all about pass under the coal, and between these grits and the coal there is a varying thickness of bluish clunchy underclay, with numerous impressions of stems of large grassy-looking plants, and a few larger and thicker stems. The latter (the thicker stems) are best seen in section, where the bank is cut away. The original bark or shell of the open stem has been converted into jetty coal, and forms a regular ring, often perfectly circular, often slightly compressed; the interior being filled in with material the same as the bed of clay in which they occur. The upper part of this clay is of a brown colour from admixture of carbonaceous matter. Its thickness varies from nine to twelve inches."

"The coal rests immediately upon this, and is in structure flaky, but hard, compact, and jetty, with small imbedded lumps of ambery-looking, resinous matter, precisely similar to that seen in the other coals. With these occur also minute, bright, glossy particles, and some thin layers, looking like vegetable matter carbonized; and in the mass are also imbedded numerous fragments of charcoal, or mineralized charred-wood. These are exceedingly fragile. This coal, on exposure, breaks up into flakes, and becomes covered with a thin ferruginous film. It breaks out in better masses, and is much less brittle, than the coal at the other localities here visited. The bed varies slightly in thickness, from three feet nine inches to four feet, and is not broken up so much as the others by layers of earthy texture and character. Two distinct backs or main jointings are seen in the coal; of these, one heads north 35° east, and the other east 45° south. Both are slightly inclined, underlying to the north and east, and dividing the mass into parallelopipeds."

"A good deal of coal had been raised here, but none had been removed, the country proving impracticable for carts. It now lies in open heaps just above where the coal is seen, and will rapidly disintegrate. Several small parallel faults traverse the rocks here, all being accompanied by slight up-throws to the north. Three of these are seen

within the length of surface over which the coal is exposed, respectively throwing the coal fifteen, six, and three feet (the most southerly being the first mentioned); these all head south 25° west, and underly at 75° to 80° to south-east. There is no apparent disturbance in the beds further than the mere shifting, the coal coming cleanly up against the sandstones, and holding the same dip and strike on either side. To the north of this, other small faults, holding a parallel direction, are seen, but the coal itself becomes, covered up with detritus."

"This is unquestionably the most promising locality of the three referred to. The coal is of better quality and more durable, the roof is strong, and the floor also good, and the whole series dips at the lower angle of 8° to the north-east. Over the coal there is a thin layer of shale, covered by thick solid sandstone."

"The principal difficulty here would be the very broken nature of the country over which it should be carried to the Irawadi; the distance, however, is not great—seven to eight miles; and I doubt not that this coal will hereafter prove a valuable deposit. It is, in general aspect and character, like most Indian coals, flaky, and with thin earthy partings, the presence of which produces the general large percentage of ash which is found to be present; but the layers of coal are fine, jetty, bright coal, highly blazing, and yielding a large amount of gas. I do not anticipate that any of these coals will pay for working, with a view to distant or extended carriage. They would disintegrate and break up too rapidly to allow of their being remunerative in this way; but for all the upper part of the Irawadi river-navigation, and for the supply of any demand which may arise in or about the capital of Burma, I look upon them as holding out a fair promise of a good fuel, in sufficient quantity."

"The country all around being at present covered with thick forest and jungle, it was impossible to follow out these beds of coal, and trace their connexion one with the other; but, from their general character and arrangement, and from the associated beds, I am disposed to think that the first and second localities represent one and the same bed, at opposite sides of an anticlinal line through the series, while the third locality belongs to an upper bed. I found no fossils in the sandstones associated with the coal, excepting near, to the village of Thingadhau, where leaves of dicotyledonous trees occur, tolerably preserved, in a hard bluish calcareous grit. The markings in the shale under the coal are too badly preserved to be of any value, only giving a clue to their general character."

In 1890 a license to work in this area was obtained by Messrs, Hudson. Walker and Herrman, who formed the Shwebo Mining Syndicate. Houses for staff and labourers were built and plant established, and work commenced in 1892. In that year 3,670 tons were raised. Government was unwilling to make a siding from the Mu Valley Railway until coal was produced in sufficient quantities to give a return for the expenditure. A small tramway costing between two and three lakhs was therefore, constructed from the mines to Kabwet, on the Irrawaddy.

In 1893 the mines were taken over by the Burma Coal Company and 9,938 tons were raised of which 900 tons turned out to be useless. In that year the daily average of persons employed on the mines was 176 men, 131 women and 13 children. This had increased in 1896 to 334 men, 122 women and 3 children, and in this year the output was 22,923 tons. From beginning to end 154,288 tons were excavated valued, in the early days, at Rs. 9-9-9, and latterly, at Rs 9-8 per ton of pure coal, or Rs. 6-8 per ton including dust. The coal was sold to the Burma Railways, Government steamers, and the Irrawaddy Flotilla Company. Towards the end the difficulty of finding labour reduced the output and the deterioration of the quality of the coal found hastened the abandonment of the work in 1904. In the previous year the engines, and machinery had been sold to Messrs. Sevastopulo and Clifford of Rangoon who extracted some 10,000 odd tons and finding that the investment did not pay stopped work. New workings were begun in 1921 and 200 tons were extracted, but work has again ceased, Beds of lignite have also been found near Thitcho in Kyunhla Township, but owing to the inferior quality of the mineral they have not been exploited.

Iron was smelted in Burmese times at Myedu, Yathi-Kunitywa, Kyaukaing, Taukkashat, Kangyigôn and Kanbalu. The ore was usually collected in *indaing* country from the surface or just below the surface. The chief centres of the industry were Kyaukaing and Yathi. "Here, in the early part of the 17th century, in the reign of Maha Dhamma Yaza, Talaing captives of war from Toungoo, were allotted lands to reside on and to cultivate on condition that they worked iron for the King. These ironworkers were one of the five classes of *asuthas* or communities of royal vassals, the other four being the workers of gold, *thitsi* (black varnish), precious stones and amber. A *than-hmu* at Myedu was the local chief of the *than asuthas*, and the ***Thanchet Wun*** at Mandalay supervised the industry throughout the kingdom. Originally revenue was collected in kind and the ironworkers Iron.

paid in a certain weight of iron yearly; but long before the introduction of *thathameda* by Mindôn, revenue in kind was discontinued and *ngwedaw*, which was the silver equivalent of the value of the iron, was paid. The introduction of the *ngwedaw* system marked the decay of the iron, as well as of the other four industries. The decline of iron smelting may be directly attributed to scarcity of fuel, and to the importation of iron at a low price. An attempt to resuscitate the industry, made towards the end of the reign of King Mindôn, who wished to have iron worked as a royal monopoly, was abandoned after a year's trial, and has never since been repeated. The method adopted in the manufacture of iron may be divided into two parts, the charcoal burning, and the actual smelting. *Pyin*, *thitya*, and *ingyin*, which produce the best charcoal, were the only woods used. These were cut into lengths of seven cubits, ranged in rows seven, eight or ten *lans* (a *lan* is two yards) in length and five or six cubits in depth, enclosed in a bamboo frame-work and filled in with earth. Passages, three or four cubits in length, were dug under each end of the pile and fire placed in them. When the timber was well alight the passage openings were closed and the fire allowed to burn for eight or ten days till the whole stack was consumed. The charcoal was then carted to the smelting pits. These were situated on the east bank of the Mu, on the banks of smaller streams, or on hill sides. Each pit was in the form of a truncated cone, the bottom diameter being about four feet and the top 18 inches. The bank or hill-side was cut away so as to leave standing room for the workmen,—the *pothugyi* and three others. This platform was on the same level as the bottom of the smelting pit and communicated with it through a narrow opening, below which some 10 or 12 earthern pipes (*hmwa*), nine inches in length and three in diameter, were ranged in a row and led air into the smelting chamber. The pit was then filled in with alternate layers of charcoal and stone containing the ore. The various kinds of stone, called *kyauk-ni-gon egayit-taw* and *eebeiktha*, were quarried out of the hillocks around Yathi and Kyaukaing. The charcoal in the pit was kept burning for 24 hours, during which time the refuse at the bottom had to be cleared away four or five times. After this came a special form of iron called *nasha*, which has no commercial value, but is much sought after by Burmese alchemists or *ekkaya-to-thamas*. A layer of molten iron followed the removal of the "*nasha*." The yield in the 24 hours was from 40 to 80 viss and the selling price was Rs. 20 to Rs. 25 per 100 viss. Smelting was carried on during the dry months only.

Gold.

Formerly gold was washed from the sands of various streams in the *Shwe-Ta-sè-thon-ywa* jursidiction, the old Shwegyin (meaning gold washing) Township in the west of the District, and Mr. Oldham also found it in the streams in the vicinity of the coal mines. Gold washing was seldom carried on systematically, and is now done by only a few persons in the neighbourhood of Ingyi, Kinbin, Nanwindaw, Seinnan, and Inhla Only two applications for licenses to prospect for gold have been made. One was rejected, and the other, a license to prospect for gold, silver and rubies near Pazi, in Kanbalu Township, was issued, and, on further application for a large extension, some 345 acres were leased in 1905 for one year.

Colonel Yule suggests that it is on account of the streams being auriferous that the country between the Chindwin and the Irrawaddy was known anciently as *Sonaparanta*, and that this country was not improbably Ptolemy's Aurea Regio which is, almost a translation of the Sanscrit name.

The Settlement Report for 1906 gives an account of the method of washing. " Almost every house in the region (Shwegyin) contains a large wooden bowl used for washing for gold. Besides her bowl the worker uses either the flat part of the thigh bone of an ox or a flat piece of wood, and also about a tical of mercury, which has been well rubbed into about half a tical of tumeric as mercury in its natural state cannot be handled. This amount will suffice for a whole monsoon. The gold worker goes to a piece of broken ground apparently any ground that consists of sandy or *thèkyatti* soil will do, and that is the prevailing soil in those jungles. A place is selected where rain water flows over a somewhat steep edge, so formed that when the washer is sitting on ground below, her head is about level with the higher ground over which the water comes. This height is found to give the right velocity to the flow of water. The worker then makes a shallow drain to guide the water, and digs down the sharp edge of the bluff, if too steep to suit her purpose. If the volume of water is too great, and if its velocity from afar seems to be excessive, a small bund is made to regulate its speed down the slope. All is now ready, and as soon as sufficient rain falls the wooden bowl is placed against the bluff where the water will flow into it. The worker sits down behind, and keeps splashing the sand and earth that comes down into her bowl, and the sand and earth along side of it, upwards into the rivulet that flows down to her. When the soil is thought to have left all its gold dust at the bottom of the bowl, it is thrown out to one side. Finally when the worker has splashed out all the soil from her bowl

except about as much as would fill a *salè* measure she dries the remainder, and puts her piece of saffroned mercury into the dry soil. The bowl is then gently shaken till there seems to be no gold dust left among the soil, whereupon the mercury is strained through a very fine sieve, and put into a bamboo cup till next time. The gold is not visible on the lump of mercury, and is said to be absorbed into it. When washing for the season is over, the mercury is placed in the fire in a little crucible of sun-dried mud. The mercury passes off in vapour and the remaining gold and saffron is moulded into a lump called *pwinsu*. The gold is sold by some in this shape at Rs 38 a tical. Most, however, refine the gold by placing it in a crucible made of the earth of an ant hill, ground to powder in combination with the semi-solid residue of rice water, or with cooked rice itself, and sun-dried. The crucible is placed in a very hot fire till the saffron is burnt away. The remaining pure gold is sold at Rs 40 a tical. A tical of 120 *ywe* of *pwinsu* when refined yields 118 *ywe* of gold. In the olden days men washed for gold because robbers used to attack the workers on their way home with their gold, but since the annexation even women and children are safe, and the men have found more remunerative occupations, such as timber felling, work at sawpits and cart making; so now only women and girls wash for gold. Each household that can keep a washer out the whole monsoon gets about $\frac{5}{8}$ to $\frac{3}{4}$ of a tical in the year. But as the work in many cases entails living in the jungle at some distance from the village, and as this is not compatible with work in the paddy fields at home, few households can spare a gold washer for more than a short period now and then."

mber.

A fossil, amber-like resin was found near Hmantha on the Irrawaddy (about one mile north of Thabeitkyin) in this district, by Dr. Fritz Noetling, imbedded in a hard coaly clay underlying a coal seam*. "The strata in which the coal and fossil resin are found belong undoubtedly to the Miocene formation. The resin is very common, but the pieces are small and difficult to extract not only because they are very brittle, but also because the clay is very hard. In appearance it looks like Burmite"—Burmite is the name given to the fossil resin of the amber mines of Upper Burma, as it is different from that generally known as amber (succinite).

eral oils.

Licenses to prospect for mineral oils in Kyunhla and Kanbalu townships have been issued at various times since the beginning of the century. During the past five years licenses have been issued to Messrs. The Indo-Burma

* See Notes on the Mineral Resources of Upper Burma by Dr. Fritz Noetling.

Petroleum Company, the Burma Oil Company, Maung Kyaw and Mr. A. D'Orlez, but there has, as yet, been no report of oil being struck.

Road metal and building stone.

The bulk of the road metal for the Shwebo subdivision is obtained from quarries at Saye and Padu in Sagaing District. The stone is not particularly good, but it is more accessible than that obtainable in Shwebo district, as the quarries are close to the railway line. Building stone is obtained from a quarry near Ta-ôn village six miles east of Shwebo. Sandstone of various qualities some of which is suitable for road metal is obtained from quarries along the Shwebo-Kyaukmyaung road. Limestone suitable for road metal can be had from a quarry at Letkaukkya, six miles south of Kyaukmyaung. This quarry was opened recently, but work was stopped as it was found that the cost of carriage by carts was excessive. Laterite is extracted from a quarry near Kyauksègan at the 6th mile on the Zigôn-Malè road. In Ye-u subdivision building stone is obtained from Ôkpodaung on the Shwebo-Lower Chindwin border. Road metal is obtained from the quarries at Wetpyudaung in Ye-u township about eighteen miles farther north. The Wetpyudaung stone is basalt trap of very good quality. Durable grey sandstone is obtained from the neighbourhood of Kodaungbo by some half dozen Indian masons, who came across from India to build the S.P.G. Church in Shwebo, and now supply most stations in Burma with stone crosses, monuments and fonts. In 1923, 1021 tons of stone valued at Rs. 510 and 4353 tons of laterite valued at Rs 2,176 were extracted in the district.

CHAPTER VI.

OCCUPATIONS AND TRADE.

Occupations.

Importance of non-agricultural occupations.

It has already been pointed out in Chapter IV that 87 per cent. of the total population was returned at the 1921 census as supported primarily by cultivation. Agriculture is undoubtedly the most important occupation in the district, but the statement that only 21 per cent. of the total population derive their income mainly from non-agricultural sources unduly minimises the importance of non-agricultural occupations. At the revision settlement (1918-23) enquiries regarding income were made in every village in unirrigated tracts and in 58 per cent. of the village-tracts in canal areas. These enquiries show that in unirrigated

tracts (excluding Shwebo town) 82 per cent. of agricultural households supplemented their income by subsidiary non-agricultural employment, while 51 per cent. of the total income of agriculturists and non-agriculturists combined was derived from non-agricultural occupations. As the seasons in which the enquiry was held were more than usually unfavourable, the proportion of agricultural income was probably below normal, but nevertheless the importance of non-agricultural occupations is clear. In canal areas, the proportion of agriculturists supplementing their income by non-agricultural occupations was lower, 60 per cent. while the proportion of total income derived from non-agricultural sources was very much lower, 30 per cent.

Trade and bazaar-selling was found to be the most important source of non-agricultural income, accounting for 29 per cent. of the total. Eighteen per cent. was earned by persons following crafts and professions. Agricultural labour brought in 17 per cent., but is a more important item in canal tracts than in *mogaung* tracts. The extraction and sale of forest produce, though confined to a limited area, accounts for 12 per cent. of the total. Carting brought in 10 per cent., cooly labour 7 per cent., the hire and sale of cattle 3 per cent. and miscellaneous occupations 4 per cent.

aders and ty traders The principal traders reside in Shwebo and other towns and villages on the railway line such as Wetlet, Kin-u, Zigôn, Tantabin, Kanbalu and Kyatthin. There are a number also at Kyaukmyaung and Sheinmaga on the Irrawaddy and at Ye-u. These export the agricultural produce of the district and import the goods required by its inhabitants. In addition there are a number of traders who go round from village to village in carts and supply the wants of the villagers. These are especially numerous in the Ye-u subdivision. They obtain their supplies in the large trading villages of the Lower Chindwin and Sagaing Districts (many of them reside in these districts) and on the return journey usually load up with paddy. In every village there are also a number of petty traders or bazaar sellers, usually women who carry round on their head baskets containing vegetables and small supplies of other foodstuffs that are required every day.

e mills. Factory industries, comprising rice mills and saw mills, though of very recent origin are now of considerable importance. The earliest rice mill in the district dates only from 1913. There are now 33 mills, the majority of which have been erected since the close of the war. With the exception of one very small mill at Ye-u and three recently opened a few miles west of Shwebo town, two at Seikkun

and one at Chiba, all are situated on the railway line so as to tap the paddy from the Shwebo canal area. Four are at Zigôn-Tantabin, two at Madaunghla, five at Kin-u, two at Myingatha, ten at Shwebo, two at Môksogyôn and four at Wetlet. So far with the exception of the small mill at Ye-u no mills have yet been established in the Ye-u canal area, but, when the new railway line from Alôn to Ye-u is completed, it is probable that rice mills will spring up at the railway stations.

Five of the mills are owned by Indians, one by a Chinaman and the rest by Burmans. Several of the mills have however been established with the assistance of capital borrowed from the chetties. In the fifteen mills included in the 1921 Industrial Census 286 persons were employed of whom 191 were males and 95 females. Most of the employees both skilled and unskilled are either Burmans or Zerbadis.

The mills work the whole year round, but most of them are closed for several days in every month, very often for more than half the month. As a considerable permanent staff is maintained throughout the year, and many of the mills are built on borrowed capital, these prolonged periods of inactivity result in high overhead charges. There would already appear to be more mills in the east of the district than there is room for, and yet new mills continue to be erected, four having been established within the last year. This would argue that the profits of the existing mills must be considerable, did one not know that many of the new millers have gone into the business without making any adequate attempt to estimate the profits likely to accrue. The majority of the millers mill chiefly on their own account for export, but there is also a certain amount of milling for hire on behalf of traders who export the milled rice. Milling for local consumption is not very extensive but is increasing. Generally hand husked rice is preferred, but in the Shwebo canal area cultivators are beginning to bring their paddy for *wunza* to the mills to save the labour of husking by hand. In Shwebo town, rice purporting to be hand husked rice is usually sold, but it very often consists chiefly of milled rice with a little hand husked rice and offal mixed with it.

Sawmills.

The sawmills in the district like the rice mills are almost all of very recent growth. The majority are situated in the north of the district. There is one at Kodaungbo railway station, one on the Katha side of the district boundary at Yindaik to which a special siding is being made, one at Pintha railway station, two at Tantabin railway station, one

at Kyunhla, two at Shwebo, two portable mills in the Thaw reserve and one Public Works Department mill at Kabo. The approximate capacity of these mills is 17,250 tons per annum and the actual outurn in the last year for which figures are available 11,100 tons. The number of persons employed is approximately 260. The mills at Tantabin and Shwebo are without rack benches, the logs being squared by hand before they are put through the saw benches.

Forest occupations. The extraction of timber and other forest produce provides employment not only for the villages in the immediate vicinity of the forests but also for sawyers and cartmen from more distant villages. The Bombay Burmah Trading Corporation employs a considerable staff, but in recent years sleeper extraction in Kanbalu subdivision has been the chief forest occupation in the district. The contractors have made very large profits, and there has been ample employment for sawyers in converting the logs into sleepers and for cartmen in carting the sleepers to the railway line. Fuel cutting for the Burma Railways and Irrawaddy Flotilla Company and for sale in Mandalay provides occasional labour for villages in the north and east of the district. The extraction of *thitsi* or varnish is an important occupation in the west of Tazè Township. Villages between Shwebo and the Irrawaddy reap grass for sale to the Supply and Transport Corps and to horse owners in Shwebo town.

Salt manufacture. The manufacture of salt provides employment for a considerable number of persons in the south of the district. The 1921 census figures show only 326 workers engaged in the salt industry, but there is also a very large number of persons for whom the industry is a subsidiary occupation. Halin, Hmetti, Thakuttaw, Kyibingan, and Leinbin near the Halin lake, Singut and Tachantha on the east of the Kadu lake and Tagundaing near Shwebo are the chief centres of the industry. There is also a little boiling at Sadwingyi in Kanbalu Township.

The following description of the method of manufacture is extracted from the Shwebo Settlement Report (1900-06)—"The modes of manufacture vary in different localities. At Halin there are three methods known as *myechauk-kin*, *myeso-kin* and *myaungtaik-kin*. Land used for the manufacture of salt under the first method is first weeded by means of a spade and then thoroughly cleared and made as level as possible by means of a seven-toothed harrow. After this process, which takes place as soon as the rains are over, the land is left until February, to be wet by the dew at night and dried by the sun in the day, when the earth is collected in heaps and is ready for use. Work on plots

treated in this fashion may be carried on throughout the year except when it is actually raining or the field has water on it. For the second method the land is ploughed, and the clods crushed and levelled by harrowing at the beginning of the cold season. Water from the hot springs at Halin is then led into the holding by ducts till it pervades the whole of it. When dry again, the earth is collected into heaps and is ready for further preparation. Work on such plots is impossible during the four months when the rain is heaviest. For the third method the land is prepared in March in the same way as for the second method and water from the hot springs let into the holdings by ducts which are two feet apart. When the field is dry the water is let in a second time, and the earth gathered into heaps when again dried. This method of work can be carried on only in the hot weather."

"The next process is the treatment of the salt earth. It is taken from the heap and placed in small quantities on a mound of earth, prepared for the purpose with a cauldron-shaped hollow on top, which is daubed with clay to make it impervious to water. At the bottom of the bowl a hole is made, from which a hollow bamboo leads to the side of the mound. Salt water from the stream or wells is poured over the earth, and allowed after soaking through the earth, to trickle through the bamboo tube into a chatty, supposed to be of a standard capacity, placed under the spout. The bowl end of the tube is plugged with fibre, tightly enough to prevent the earth from passing down. Thence the water is transferred to and stored in a glazed jar. When enough has been accumulated it is boiled in a cauldron of 7 gallons capacity. When a sufficient quantity of water has evaporated the salt forms as a deposit at the bottom of the cauldron and the remaining water is poured off into a separate jar, to be boiled again when enough has been got together. Each boiling takes 8 to 10 hours; one is done from early morning till the afternoon, when the cauldron is emptied; a fresh lot of water is then put on, and a second boiling begins; the fires are kept up till the boiler goes to sleep, when they are banked. By the morning the deposit has been laid, and the cauldron is again emptied. The two boilings produce about 25 viss of salt. That made from a *myechauk-kin* is of a reddish yellow colour, that from a *myeso-kin* of a bluish white, and that from a *myaungtaik-kin* white. The price is the same for all three kinds, namely Rs. 10 and Rs. 8 per hundred viss for cash after manufacture and prospective advances respectively." The present cash price is about Rs. 17 or Rs. 18 for Halin salt and Rs. 15 for salt from other villages.

The method employed in villages other than Halin is similar to that employed at Halin for *myeso-kins* with the exception that the water instead of being led into the ducts from a natural spring has to be raised from wells in buckets worked with a rope and wheel. At Thakuttaw, Leinbin and Kyibingan the wells are from 45 to 50 cubits deep. At Singut and Tachantha they are from 25 to 60 cubits deep. This involves extra expenditure both in digging the wells and in raising the water from them. At Singut there is a further differentiation in the mode of manufacture. The water is not led from the well to the land by ducts but is carried in chatties and sprinkled morning and evening for three days over the land which has been prepared by harrowing.

lkaline arth.

Villages east of the railway line between Shwebo and Kin-u, notably Magyidôn, Chaungzôn, Thanbo, Ywameitha, Pôkkôn and Nyaunggôn have a subsidiary occupation in the collection and sale of *satpya* or soap sand which is found in that area. The months for collecting it are December, January and February when there is dew. It usually forms on a sandy surface and is collected by boys and girls. The occupation is considered unhealthy, and older people do not take part in it. It is generally considered unsafe to work more than ten days a month. The soap sand is exported from Kin-u railway station or hawked round the district. The usual price is Rs. 1-4 for ten baskets delivered at Kin-u. One person can collect 8 or 10 baskets in a day.

lazed ttery.

Glazed pottery (စဉ်အလုပ်) is manufactured at Shwedaik, Shwegun and Nwènyein near Kyaukmyaung on the Irrawaddy. The ware includes Pegu jars and bowls of all sizes, water pipes, small mortars for pounding chillies, vases and fancy figures. The larger articles are moulded by men, the smaller by women. Three kinds of clay, yellow, red and blue are used in the manufacture. The clay is obtained from the hilly ground to the west of the three villages, which are strung out along the bank of the Irrawaddy. The earth is soaked in a port of water for about 24 hours, dried in the sun, and, when dry, pulverised in a rice pounder. It is then made, with the addition of water, into lumps which are kneaded with the feet till the clay is of the required consistency. Jars, pots, and such articles as can be turned are shaped by hand on a potter's wheel. Other articles are moulded. Medium sized jars are made in two parts separately—first the bottom and then the top—which, after being partially dried in the sun, are joined together, the joint being patched over with wet clay both inside and out. Big jars have to be made in four pieces, commencing

from the bottom. When the jar, or figure, or whatever it is, is completely moulded, it is dried in the shade. The glaze is then put on and the articles are placed in an enormous oval shaped oven, made of bricks plastered with clay. When it is full, a huge fire is lighted at the door. At the back of the oven, which is built up the slope of rising ground, is a small window which acts as a funnel to draw the heat through the oven, and enables the operator to see how the pottery is getting on. When the glaze becomes liquid, the door is bricked in, and the fire allowed to die down. About five days later, when the jars are cool, the oven is opened and they are removed. The glazing is done with a substance called *chaw* (ချေါ်) which is the dross of silver ore, left after the metal has been extracted. It is obtained from the Shan States. No one can run a kiln unless he has a fair amount of capital. Labour has to be hired for several of the processes, and the larger manufacturers spend nearly Rs. 300 per annum on firewood. There is a co-operative society which finances the workers. The produce is chiefly sold wholesale to traders from the south, who remove the produce on bamboo rafts. A few of the big men take their own rafts down the river, and jars required for use in the district are removed by cart. The prices range from Rs. 450 per 100 for jars to hold 150 viss to Rs. 75 per 100 for jars to hold 25 viss.

Unglazed pottery.

Farther down the river at Ywathitgale, near Sheinmaga earthen tea-kettles are manufactured. The clay is obtained from Madaya Township and mixed with red earth obtained from the high ground behind the village. "The cold weather is the most favourable season, for in the hot months the loss from cracking and breaking, during the baking process, amounts to from 20 to 30 per cent. Two kinds of kettles are made, the smooth and the rough; the former are thinner than the latter, take longer to make and fetch a higher price. The kettles are taken to Mandalay and sold wholesale. Some are taken by boat and steamer up the river and sold retail. The clay is first soaked in water, and then kneaded by being put in gunny bags and stamped with the feet When of a proper consistency it is shaped on a wheel by hand. For one or two of these processes a labourer is sometimes hired. The spout and handle are made separately and fixed on to the kettle while the clay is still wet and adhesive. The smooth kind is made by scraping and paring with a knife especially made for the purpose, until the kettle is reduced to the desired thickness. Before it is quite dry the kettle is polished by rubbing with a piece of wood. When thoroughly sun-dried the kettles, of both kinds, are placed in a heap, with straw between each

layer, and straw beneath and above the whole. The heap is covered with a plaster of cowdung and mud to form an oven and the straw set on fire. About three days later when the whole is cool, the oven crust is broken off and the pots removed."

Ordinary pots such as water pots, cooking pots, *tari* collecting pots are made in several villages in the district, where pottery clay is obtainable. The most important centres are Myindaung, on the Ye-u—Kin-u road, and Obo near Shwebo.

Ordinary Burmese bricks required for building pagodas, wells and the like are usually made near the site where they are required. The black soil common in the district is used. Bricks of the best quality are made from the *tanè-nôn* soil found in the neighbourhood of the Mu river.

Paste and lacquer.

Lacquer images of Gautama, called by the Burmans *manpaya* are made in a group of villages about eight miles west of Ye-u, notably at Mè-o, Sithèmye, Malwe and Leindaw. The craftsmen are cultivators who make the images in their spare time. "The method is to make a rough image of well kneaded mud, moulding with the hand where possible, and finishing off the more intricate parts with a wooden, or iron, implement (*thanlet*). Before the mud is dry, the image is daubed over with a wash of straw ash and water. Over this core is laid a plaster of *thitsi* mixed with finely sifted teak sawdust, the eyes, nose, and delicate parts being moulded with the iron, or wooden implement. The mud core is then removed the plaster being cut open to extract the mud from the head, arms and such like difficult place The openings are next closed again with the *thitsi* and sawdust plaster (called ထားမြီး) and the images coated with a lacquer (ထားမြီးချ) of clear strained *thitsi* mixed with the ash of straw or bran. The outer coat is smoothed with an iron instrument smeared with sesamum oil, and left to dry. When the lacquer is set, the image is washed, polished with stone, and varnished with the purest strained *thitsi*. The images are left in this condition till a purchaser appears, when they are gilded, if desired. A man can turn out altogether about 30 to 35 in a season. The work cannot be done in the hot weather for the mud gets too dry, and the lacquer does not set properly; and it cannot be done in the rains for, though the lacquer will set, the mud remains moist and sticks to it." Few *manpayas* are sold in Burma almost all finding their way to the Shan States, in which they are sold everywhere, even in places as remote as Kengtung. Most of those sold in the Shan States are almost a cubit high. Prices there vary from year to year ranging from Rs. 5 for a small figure to Rs. 60 or Rs. 70 for a life size image. A

coolie engaged locally to carry a *manpaya* seller's wares to the Shan States besides getting all his living expenses earns about Rs. 45 for the return journey of three or four months. In transit the smaller *manpayas* are packed inside the bigger and the whole load is carried on a *tanbo*. As the images are hollow and light a considerable load can be carried. "Other lacquer articles are made too. The ground work is moulded of the *thitsi* and sawdust plaster, and over this is daubed lacquer of *thitsi* mixed with the ash of bran. In olden days the plaster used to be made by mixing the *thitsi* with powder obtained by baking bones of oxen and buffaloes, and pulverising them. Hence its name သားရိုး။. The old plaster was brittle and liable to gape, and the new is better. After the lacquer has been applied, ornamentation may be added by putting on scrolls or figures of a sort of putty made by boiling *thitsi* with the ash of cowdung. The whole is finally varnished with a coat of pure shining *thitsi*, mixed with vermillion if a red colour is required. It baskets, bowls, raised trays or the like are made, the frame is constructed of thinly split bamboo, either woven or coiled round in a spiral, according to the shape of the articles. This is first coated with *thitsi*, and when that has set, pared into shape, covered with lacquer and finally polished and varnished. This work, in distinction to image making is carried on in spare moments during the rains, when the *thitsi* sets best.' Yathaya in Tazè Township is noted for the making of trays, *ôks* and *taung-lans* and has recently started making tiffin carriers. *Taung-lans* are also made at Sibôktaya, Kyabo and Baukthindôn in Kin-u Township. The articles are used both north and south of Shwebo District. Bamboos are obtained from rafts at Ye-u and the *thitsi* from the jungle villages in the west of the district.

Bamboo mats and baskets.

The weaving of coarse bamboo mats is an important subsidiary occupation in a group of villages in the south of Kanbalu Township east of the railway line. Pôkkon, Sudat, Zadi, Thalè-u, Chaunggan, Pyindaw, Sinnin, Thabyetha, Setkyi, Thayetkangyi, Minba, Thabeikhmauk and Letsè are the chief centres of the industry. Baskets are woven at Nagabaw in the same area. The bamboos are obtained either in the Kangyi reserve or in the adjoining unclassed forest. The villages close to the forests usually cut their own bamboos and split them themselves. The villages farther west purchase bamboos already split from the Pègyi and Teindaw villagers. The mats when woven are exported by rail from Zigôn railway station or hawked

through the district. The usual wholesale price is Rs. 25 per 100 mats. The work is done by cultivators after harvest, and earnings vary from Rs. 25 to Rs 150 per household.

Pas. "*Tagauk pas* are made at Hgnetpyaw near Kin-u from the leaves of the palmyra palm; these are split into strips of uniform width, but of varying length, and are interwoven to make the *pas*, of which there are three standard sizes. The strips are interwoven at right angles for the receptacle but diagonally for the cover. It is customary to weave the receptacle first, and then the cover, which is made to fit fairly tight. Both parts of *pas* have two layers, of which the inner is made from the young leaves, and the outer from the stem of old leaves. For the sides of the receptacle the strips are bent over and woven back to the base, after the desired height has been obtained; and in some cases a black strip is woven in along the bottom of the sides. Similarly for the cover, when the required length has been reached, the strips are turned over to form the corners and then woven down to form the sides, which are bound round with a stronger strip and fastened with *shaw*. This last job is often done by women; but they are never engaged in the actual weaving which entails sitting up for long hours, and is undertaken by strong men only. The *pas* are first woven with the uncoloured strips and then strips coloured black or red are let in to form the design. For dyeing, the young leaves, and stems of the older ones, after being slit into strips, are pared, while still fresh, with a knife till they are of the same thickness throughout, and then dried in the sun; when dry they are soaked in water and still further pared and smoothed and finally sun dried. The strips to be blackened are buried in wet clay for five or six days, then boiled in water mixed with the leaves of the *zi* tree, and, when sufficiently boiled, and sun dried, they are again buried in wet clay for three days and then washed with clean water and sun dried. Others are coloured red by being boiled with the young leaves of the teak tree for about an hour and then sun dried. *Pas* are woven only during the short interval between the garnering of the harvest and the regular tapping for juice of tari trees. Weaving is not carried on every day of the month but only when the worker is at leisure, at most for 10 or 15 days at a time. The *pas* are mostly bought wholesale by local merchants who retail them at a profit in Mandalay and Shwebo."

Combs. Burmese wooden combs are made at Kundaing east of Kin-u. The wood used is *kyungaung-nwè*, *hnaw* and *tè*. It is extracted by local people and sold to the comb makers at Rs. 5 or Rs. 6 per log 15 or 17 feet long and two and a half or three feet in girth. A log yields about 1,000 combs.

In Kundaing village there are eleven comb manufacturers. They combine this work with agriculture, but their employees are not ordinarily agriculturists. The combs are first made in the rough, that is, the comb is shaped and teeth cut out with a saw. They are then finished and polished by a different set of men. In the village there are about 45 men engaged in cutting out the rough combs and about 15 in finishing them. Each manufacturer employs five or six men. Those engaged on the first process are paid at the rate of Rs. 7-8 per 1,000 combs. The polishers receive Rs. 5 per 1,000 combs. A workman can produce about 50 rough combs or 100 polished combs in a day. The finished product is purchased by Mandalay traders who come up and purchase locally at the rate of Rs. 20 per 100 combs.

At Tabayin, Taungbyin and neighbouring villages rosaries are manufactured from the shells of cocoanuts. The beads are cut out and shaped chiefly by women and children. The cocoanut shells are imported from Moulmein. **Rosaries**

Rotary paddy husking mills worked by hand (ကြိတ်ဆုံ) are manufactured at Hmetti village east of Halin jheel. The stones consist of cylindrical shells of stoutly woven bamboo, filled partly with hard rammed clay and partly with a home made cement composed of 4 parts black cotton soil, 2 parts lime and 1 part salt. The grinding surfaces are corrugated by bamboo strips placed in the composition while it is still moist. These bamboo ribs help to bind the cement and keep it from cracking, while the method of arranging them keeps the paddy between the stones until it is husked. The mills have been made in Hmetti for the last ten years only. They are made in three sizes, taking 8 pyis, 10 pyis and a basket of paddy at a time. The medium sized stone is about eighteen inches in axis length and a little more in diameter of horizontal section. Prices vary from Rs. 2 to Rs. 4 for the stock sizes. The mills are used fairly extensively over the southern half of the district. They will grind about 250 baskets of paddy before they wear out. Rice from the ကြိတ်ဆုံ has always to be given a pounding in the ordinary wooden mortar before it is fit for use, but the mill shortens the process of cleaning very considerably. As in the case of many other village industries the manufacture of rotary mills at Hmetti is not a whole time but a more or less spare time job. **Paddy husking mills.**

Cotton cloth is woven in nearly every village in the district for home requirements, and in most villages there are women who supplement the income of their households by selling the produce of their looms. Mingôn and Kawywa near Shwebo produce cotton *longyis* for sale in considerable **Weaving**

quantities. Silk weaving on an extensive scale is confined to the two large villages of Seikkun and Chiba, a few miles west of Shwebo. The raw Chinese silk is purchased in Mandalay, wound on reels and dyed locally. The typical *longyi* produced in these villages is a dark coloured hard-wearing garment, in which both silk and cotton are interwoven. According to the 1921 census there were 46 males and 2,316 females engaged in silk weaving in the district. At settlement in 1922 it was ascertained that in the two villages of Chiba and Seikkun 506 households engaged in silk weaving on a commercial scale. Of these 434 worked on their own account and 72 were employed by others. Of the weaving households 303 were agriculturists and 203 non-agriculturists.

Other occupations. In addition to the special occupations already mentioned there are many others not peculiar to the district. Carpenters and bricklayers are scattered throughout the larger villages. Stone masons are usually natives of India. Isolated smithies are found here and there, but blacksmiths mainly congregate in Shwebo, Tabayin, Magyidôn east of Kin-u and Shwegyin in Wetlet Township. They make *dahs*, spades, and reaping sickles. In Shwebo there are one or two very competent workmen, the father of one of them having received his training in France in Burmese times. Carting is an important source of income in most villages, and there is usually ample employment for the poorer classes on earth work on roads and canals in the open season.

Trade.

Markets. There are Municipal bazaars at Shwebo and Ye-u and District Fund bazaars at Zigôn, Kin-u and Wetlet on the railway line and at Kyaukmyaung, Thitseingyi and Sheinmaga on the Irrawaddy. Shwebo town is the most important produce market in the district followed by Kin-u, Wetlet and Zigôn. The remaining railway stations and Kyaukmyaung, Sheinmaga, Thitseingyi and Malè on the Irrawaddy are trade centres of minor importance. Ye-u is mainly a distributing centre. In the interior of the district with the exception of the township headquarters at Kyunhla, Tazè and Tabayin there are no shops in the villages such as are found in every large village in Lower Burma. The ordinary commodities required by the villagers are either carted from village to village by itinerant traders or in the case of lighter and more perishable articles carried round by women on their heads. In the absence of railway communication the former practice is more prevalent west of the Mu than in the east of the district. The annual pagoda festivals or fairs also give the

villagers an opportunity of laying in stocks of all their requirements at reasonable rates, as they are attended not only by shopkeepers from distributing centres in this district but also by traders from adjoining districts, and competition is fairly keen. The principal pagoda festivals are at Seikkun, Kyaukmyaung, Thihadaw, Sheinmaga, and Thitseingyi in Shwebo subdivision, Myedu, Ukingyi and Kyunhla in Kanbalu subdivision, and Nwabetkyi, Shwekadaw, Kyaukthinaing, Bôkywa, Mayagan, Tawgyaung, Paungdaunggu, and Nagadwin in Ye-u subdivision.

Exports.

The chief exports are rice, paddy, beans, cotton, millet, groundnut, wheat, jaggery, timber both unconverted and converted (particularly sleepers), resin, oil, cutch, wax, firewood, salt, soap sand, Pegu jars and other glazed pottery, tea kettles idols, trays and bowls made of paste and lacquer, beads, mats and baskets, *pas*, combs and silk *pasos*.

Imports.

The district imports *ngapi* (the best quality from Lower Burma inferior quality from Katha), dried fish, dried meat, groundnut oil, sesamum oil, pickled and dried tea, dried chillies, kerosene oil, candles, matches, cheroot wrappers, tobacco leaf and stalk, betel nut, yarn, piece goods and hardware.

Lines of trade:— (a) the railway.

The Mu Valley section of the Burma Railways passes north and south through the heart of the portion of the district that lies east of the Mu river and is the main artery of external trade for the district, as from almost every station a road branches either east to the Irrawaddy or west to the Mu.

(b) the Irrawaddy and Mu river.

With the construction of the railway and the rise of trading centres at the various railway stations the Irrawaddy has lost its importance as a channel for the trade of the district, and now serves little more than the villages on its banks. The trade of villages in the interior has been almost entirely attracted to the railway line. The Mu, though it flows north and south through the centre of the district, can never have been of very great importance as a trade route, as it is shallow and full of snags for the greater part of the year. It was however formerly used during the rains by boats of small capacity, and it was to its position on the river that Ye-u originally owed its importance. With the river water now drawn off into the canals at Kabo, the Mu has ceased to be a line of trade, though it is still utilised as a floating stream for rafts of timber and bamboos from the north of the district.

(c) Road routes.

Other than the roads that act as feeders to the railway the chief lines of trade by cart are the roads running north and south in the Ye-u subdivision. Of these the

most important is the route from Budalin in the Lower Chindwin through Saingbyin and Tabayin to Ye-u with a loop running through Mayagan to Ye-u. Another route from Ayadaw, Naunggyiaing and Wadawma in the Lower Chindwin leads through Neyakin and Leinhla into the Ye-u canal area. From Ye-u two routes continue north one through Tazé, Nwabetkyi and Ywashe to Kyunhla, the other through Kunôn, Tamadaw and Kaduma to Paga and the Upper Chindwin border. From Kin-u on the railway there is a route to Tinbaungga on the Irrawaddy opposite Thabeikkyin and thence to Mogôk. With Sagaing district there is also considerable cart traffic, but there is no through road, and carts travel by inter-village roads or follow the railway line. When they reach the Shwebo canal area they usually follow the canal service roads running north and south.

Distribution of exports. Rice and paddy are the chief exports and the greater part of the exportable surplus of the east of the district is exported by rail. The growth of the local rice milling industry has revolutionized the trade. Up to 1914 practically the entire surplus available from the rice crop of the district was exported to Mandalay and Rangoon in the form of unhusked rice. In that year 11 per cent. of the crop exported by rail was shipped as husked rice. By 1919 the proportion had risen to 66 per cent. and in 1923 it was 89 per cent. With the exception of a relatively small amount that is purchased unhusked by cartmen from Sagaing District, practically the whole surplus crop of the Shwebo Canal area now leaves the district as clean rice. Stations north of Tantabin export the bulk of such rice as leaves the district by rail unhusked. The total average annual export by rail for the ten years 1914 to 1923 is 82,658 tons of paddy and rice reduced to terms of paddy, reckoning two tons of rice as the equivalent of three tons of paddy. The Burma Railways has recently taken advantage of the establishment of the small mills to impose a higher freight rate for clean rice than for paddy. Shwebo railway station ordinarily exports about 40 per cent. of the crop that leaves the district by rail, and in 1923 its entire export was in the shape of clean rice. The superior fine-grained *lonthe* rice milled from *ngayunwa* and *mweswè* paddy is ordinarily purchased by Mogul street merchants for export to India, where there is a market for this special variety. Other varieties of paddy known generally as *bu saba* are milled into *ngaseingale* rice and exported to Myingyan, Meiktila, Pakôkku and Lower Chindwin districts. Villages in the east of Ye-u subdivision are

within the attractive area of the Mu Valley railway, and their crop is exported *via* Shwebo, Kin-u and other railway stations farther north. The surplus crop of the south of the Ye-u canal area and of the east of the subdivision generally is, however, bought up by cartmen from the Lower Chindwin District, some of whom come north to buy their own supplies of *wunza*. Others are traders who having disposed of their goods in this district take back a load of paddy for sale in the Lower Chindwin. Again cultivators on the Shwebo side of the border husk rice by hand in their own villages, cart it into the Lower Chindwin and hawk it round the villages there. The new railway in course of construction between Alôn and Ye-u will doubtless reduce the volume of this cart traffic. Beans are exported by rail from Shwebo, Wetlet, Tantabin and other stations to Mandalay and Rangoon. Those grown along the bank of the Irrawaddy go by boat to Mandalay. In 1921-22 over seven thousand tons were exported by rail. Cotton from the south of the district goes by cart to Ywathitkyi and Myinmu in Sagaing District, where the Myingyan mills have collecting godowns. Some of the groundnut is exported by rail from Paukkan railway station to Sagaing, but the tendency now is to express the oil locally, and a press worked by steam power has recently been opened in Shwebo town. Millet from the south-west of Tabayin Township is exported by cart to Mônywa. Jaggery from the villages lying to the south-west of the Ye-u Canal and from the east of Shwebo subdivision is carted to Shwebo or Kyaukmyaung and Sheinmaga on the Irrawaddy, whence it is exported up river by boat. The Ywathitkyi jaggery goes north by cart, and is sold in Kyunhla township in this district and in Wuntho township in Katha District. Timber and other forest produce leave the district by the Mu, the Irrawaddy and the railway. Salt from Halin and surrounding villages is not only hawked throughout the district but is also purchased by traders from Sheinmaga, Thitseingyi, Shagwe and other villages on the Irrawaddy, who dispose of it to the fishing villages in Mandalay and Katha. Halin salt is specially esteemed in making *ngapi*, as it preserves the head of the fish.

Distribution of imports.

Local traders purchase their stocks principally in Mandalay. Shwebo town is the main distributing centre, but in almost all villages at railway stations there are traders engaged in the distributing trade. Villages in the south and west of Ye-u subdivision draw their supplies mainly from Mônywa, Alôn, Thazi and other trading centres in the Lower Chindwin.

Weights and measures.

The measures in local use are the *tin* or basket, the *pyi* one sixteenth and the *zalè* one sixty fourth. The size of the basket is not uniform throughout the district. It is largest in villages along the Irrawaddy where it is three *zalès* smaller than the Government nine-gallon standard. In the Shwebo canal area it is ordinarily about seven *zalès* smaller than the Government standard. Elsewhere in Shwebo subdivision it is eight or nine *zalès* smaller. It is smallest in the west of Ye-u subdivision where the average village basket is ten or eleven *zalès* smaller than the Government standard. The weights used are the viss (3·65 lbs.) and fractions of it. In the villages however the weights are often inaccurate.

CHAPTER VII.

MEANS OF COMMUNICATION.

Railways.

The Mu Valley Railway runs north and south through the centre of the eastern half of the district and serves the area east of the Mu adequately, though there are the usual complaints from traders of difficulty in securing wagons. The length of the portion of the line in the district is 116 miles and there are 14 railway stations. These are :—Paukkan (420), Wetlet (430), Môksogyôn (438), Shwebo (447), Myingatha (452), Kin-u (461), Madaunghla (467), Tantabin (473), Tangôn (484), Kanbalu (493), Thityabin (501), Pintha (509), Kyaitthin (519), and Kodaungbo (530).

The Sagaing-Shwebo section of the railway, the survey of which began in 1888, was opened to passenger traffic on 1st July 1891. The Shwebo-Wuntho section was opened to goods traffic in April 1892 and to coaching traffic in March 1893. The survey for a branch line from Kin-u to Kabwet and Thabeikkyin was undertaken in 1898-99, but it is somewhat unlikely that this line will ever be constructed. In the same year an estimate for a bridge across the Irrawaddy at Sagaing was prepared, but up to date the river has to be crossed by ferry. The delays incidental to crossing hamper trade.

A branch line is at present (1923) in course of construction from Alôn in the Lower Chindwin to Ye-u, the capital having been provided by the Rice Control Profits Fund. In 1923 the section from Alôn to Sègyi on the district border near Saingbyin was opened. In this district there will be stations near Kanbya, Tindeinyan, Zawa and Ye-ugôn a mile west of Ye-u. There is also a proposal to

extend the line farther north to Tazè. The Ye-u-Alôn line will link up with the Alôn-Sagaing branch and provide an easy outlet for paddy from the Ye-u canal area, the market for which is at present limited to villages in the Lower Chindwin District. It is somewhat doubtful whether the extension to Tazè would prove remunerative, as the exportable surplus is large only in favourable seasons.

Another short branch some twenty miles long is at present in course of construction in the north of the district from Kyatthin railway station to Yindaik on the Mu in Katha District. There is a possibility that the line will be carried across the Mu on a causeway and continued into the forest west of the Mu. It is being constructed with old materials and is only intended to carry sleepers and firewood required by the railways.

Rivers. The Irrawaddy is an important channel of trade only for the villages on its banks. For the general trade of the district it is unimportant. The Irrawaddy Flotilla Company started regular weekly steamers between Mandalay and Bhamo in 1886 and also steamers on short runs from Mandalay to Kyaukmyaung. At present the Mandalay-Bhamo mail boat passes up and down the river once a week, calling at Kyaukmyaung and Malè. There is a cargo boat once a week between Mandalay and Bhamo, and the Mandalay-Thabeikkyin ferry calls twice a week at Sheinmaga, Kyaukmyaung and Kabwet. The river is also used by rafts and country boats.

As already pointed out boat traffic on the Mu in this district has practically ceased since the construction of the canals. The river is however still used for floating rafts of teak logs and bamboos which can be passed through the large span openings in the headworks.

Roads. When the district was occupied at the end of December 1885 it contained no roads other than the ordinary inter-village tracks. The first road to be constructed was the Shwebo-Kyaukmyaung road linking up Shwebo with the river. Work began in April 1886, and the road had been raised, bridged and metalled throughout by 1888. The construction of the Shwebo-Ye-u road was begun in the rains following on the occupation of Ye-u in May 1886. The road was raised and bridged throughout by 1888. The Shwebo-Tantabin road following the line of the old Mu Canal was made in 1891, and the road from Tantabin to Malè was constructed in the same year. In that year too Rs. 22,438 was spent in famine relief operations on the construction of the Kin-u-Kabwet road. On the Ye-u side the Ye-u-Nwabetkyi road was started before the end of

1886 to keep in touch with the Nwabetkyi outpost. The Ye-u-Kunôn-Kaduma-Paga road was begun in 1888. The Ye-u-Kin-u road was constructed in 1891 to join up Ye-u with the railway. The Ye-u-Tabayin-Mônywa road was completed to Tabayin in 1891 and to Mônywa in 1897.

A full list of the roads in the district is given in Volume B. Through communication by road with adjoining districts is deficient. Thus there is no north and south road from Shwebo to Sagaing or from Shwebo to Katha. There is a project for a main through road from Sagaing to Katha on the road programme, but no funds have yet been allotted for the construction of the section in this district. West of the Mu there is a through road from Ye-u to Mônywa *via* Tabayin and Saingbyin. This road is raised and bridged throughout, but where it passes through the central *tanègyan* basin of the Ye-u Canal area the black cotton soil makes a very rough surface in the dry weather and is impassable after rain. The other through road in the west of the district from Ye-u to Myinmu in Sagaing District is in fair order between Ye-u and Mayagan. From Mayagan south it exists only on the maps. For the ten miles between Mayagan and Magyiôk an expensive road would be required, as the alignment passes through the worst black cotton soil in the district. The crossing of the Payanpaga *chaung* would also require an expensive bridge.

Within the district the road system is well conceived. East of the Mu river, the roads generally run from east to west and act as feeders to the railway line. Within the Shwebo Canal area additional north and south communication is provided by the service roads along the berm of the canal and its distributaries, while the Shwebo-Ye-u road is a most useful diagonal road. Through north and south communication such as would be provided by the projected Sagaing-Katha road is however still needed. West of the Mu roads generally run north and south, but east and west connection with the Mu Valley railway is provided by the Nwabetkyi-Kyunlè-Tangôn, Kaduma-Tazè-Shanzeik-Zigôn, and Kaduma-Ye-u-Kin-u roads. The crossing of the Mu which is nowhere bridged is however an obstacle to easy communication. During the rains ferries add to the cost of transport and in high floods the ferries do not risk the crossing, while during the open season, when the water is low, the pull through the sandy bed of the river is heavy, and most cartmen prefer to pay the toll required by the ferry lessee for the use of the temporary bridge erected by him. When the Alôn-Ye-u railway is opened feeder roads leading to the railway stations will be required.

The only roads metalled throughout are the Shwebo-Kyaukmyaung road (17 miles) and the Kin-u-Ye-u road (12 miles.) Recently the first five miles of the Shwebo-Ye-u and Shwebo-Tebin roads have been metalled on the sections adjoining Shwebo. These two roads carry the heaviest traffic in the district. West of the Mu a beginning has been made with the metalling of the Ye-u-Tabayin road commencing from Ye-u. A short section of the Ye-u-Mayagan road has also been metalled adjoining Ye-u. Roads in the railway towns are partly gravelled. The remaining roads maintained by Provincial and District funds are banked and bridged only, with a few short stretches of gravel. In the case of the areas east of the railway line and north-west of Ye-u, roads of this description are generally adequate. Traffic is moderate, and water drains away freely after rain. In the black soil of the Shwebo and Ye-u Canal areas a road passable at all time cannot be made without metalling. A great improvement has however been effected in these roads by frequent sanding and the use of the road drag. They are still impassable after heavy rain, but owing to the admixture of sand they now dry up much more rapidly than formerly. They are cut up very badly however by the heavy cart traffic they have to carry in the open season. Outside the irrigated areas access to roads is fairly easy all the year round. It is seldom that the rainfall is so heavy as to make the ordinary village track impassable. In canal areas it is otherwise. From June until the middle of January the combination of canal water and *tanè* soil makes access to roads from villages not actually situated on them very difficult. A considerable measure of relief is afforded by service roads that run along the outside berms of the canals and their distributaries. These generally run north and south and enable carts to reach the feeder roads leading east and west to the railway line. For the most part they are merely tracks at the foot of the canal bund, but they require no bridges as they utilize the canal embankment wherever water is crossed. In recent years much has been done to improve these tracks by raising their level and by sanding, but more money could be very profitably expended in extending and improving the system. On all canals, distributaries and minors one bank is maintained as a cycle path. These paths, though merely levelled and sanded, provide excellent going for cyclists and pedestrians in fine weather. There is at present a proposal to gravel some of the more important tracks, so that they can be used at all times. The bank along the

main canal and Môksogyôn branch from Kabo to Wetlet is wide enough to take a motor car. In the north of the district there has recently been much activity in the construction of forest roads leading to the railway and the Irrawaddy to facilitate the extraction of timber.

rries. There are ferries across the Irrawaddy at Malè, Mala, Shagwe, Thitseingyi, and Sheinmaga, and across the Mu at Kyunhla, Kanbyu, Mugwa, Kyunlè, Tôktalôk, Etraw, Inbin, Pinzeingin, Lèywa, Ye-u, Muthagôn, Zeinzun, Wègyi and Mugan.

rt hire. The Government rate of cart hire for carts that are requisitioned is three annas per mile up to seven miles, and four annas per mile for journeys exceeding seven miles. The rates ordinarily paid by the public by private contract are slightly lower than these rates

blic nveyances. Taxis ply regularly for hire between Kin-u railway station and Ye-u and between Shwebo and Kyaukmyaung. There are also a number of taxis in Shwebo that can be hired for special journeys. With careful driving a Ford is able to negotiate most of the roads in the district in the open season at the cost of an occasional broken axle.

st houses. Rest houses are shown in statement E in Volume B. In canal areas these are usually substantial buildings maintained in good repair. Elsewhere they are very often in an indifferent state of repair.

sts. The postal system was introduced into the district on 1st December 1887 by the opening of two post offices, one at Shwebo, the other a branch post office at Tantabin. Line establishments were maintained at the same time between Shwebo and Nyaungbintha, Shwebo and Tantabin, Shwebo and Kyaukmyaung and Tantabin and Tangôn. In the year 1888 a branch post office was opened at Malè and a mail line introduced between Kin-u and Tantabin. In 1890 two more post offices were opened one at Shwebo Cantonment and another at Kanbalu. In the following year (1891) two post offices were opened at Kyaukmyaung and Sheinmaga, and in the same year a trolly service was introduced between Shwebo and Tantabin and the runner line abolished. In subsequent years post offices were opened at Tabayin (1892), Kin-u (1894) and Tazè (1895). In 1892 the trolly service was further extended to Wuntho in the Katha District during the operations against the Wuntho Sawbwa. Between 1896 and 1908 three new offices were opened at Tôktalôk, Kabo and Wetlet, but in the same period the Tôktalôk and Kabo offices were closed as were also those at Kabwet, Malè, Sheinmaga and Tazè, as adequate use was not made of the postal facilities offered.

At present there are 14 post offices in the district. These are:—Head office (Shwebo), Sub-offices (Kanbalu, Kin-u and Ye-u), Branch offices (Tantabin, Wetlet, Kodaungbo, Kyatthin, Kyunhla, Tangôn, Tabayin, Tamadaw and Tazè). There is also an experimental sub-office at Pintha. The post offices of the district are under the control of the Superintendent of Post Offices, Northern Division, with headquarters at Shwebo.

Telegraph

There are five combined post and telegraph offices in the district, *viz.* Ye-u opened in 1899, Kyaukmyaung in 1917, Kanbalu in 1921 and Kin-u in 1922. Shwebo was converted into a combined post and telegraph office in 1906. Prior to this date it had a departmental telegraph office.

Telephone

There is a non-departmental telephone exchange in Shwebo town worked by the police The system at present comprises seven connections to the office and residence of the Deputy Commissioner, the office and residence of the District Superintendent of Police, the office of the Jail Superintendent, the Cantonment Police Guard and the Military Police Quarter Guard in Cantonment. There is also a telephone system for the two major canals, the Shwebo and Ye-u canals. The system connects the Shwebo Canal office in Shwebo with Kabo, Sindôn, Myittaw, Lôndaw, Maukkyo, Shwebangôn, Môksogyôn and Wetlet. On the Ye-u side Ye u is connected with Kabo, Satthe, Nyaunghla, Pauktaw and Magyizauk and can communicate with Shwebo *via* Kabo.

CHAPTER VIII.

FAMINE.

Famine and years of scarcity.

Prior to the introduction of irrigation from major canals, and the improvement in communications effected by the construction of the Mu Valley railway, the district was seldom free from the menace of famine. The Original Settlement Report recounts the traditions of famines before the annexation. "There is one great famine known as Maha-thayawdawgyi which lasted about six years. Thousands of people died; in fact the name indicates that the corpses were on the face of the earth as the debris (*thayaw*) brought down by a flood." The famine is usually placed about 1806 A.D. to 1812 A.D. "Crime of every sort was rife, tigers took a heavy toll of cattle and of human beings who searched the jungle for edible roots. Villages were depopulated, those

inhabitants who escaped death seeking a refuge in larger villages, to leave these again when they were broken up in their turn, for still larger villages." Another famine took place in 1826 A. D. due not so much to drought as to the first Burmese war which took away a large proportion of the able-bodied men and demoralized administration generally, with the result that bad characters got the upper hand and agriculture suffered. There was also great scarcity due to drought in 1875-76 A.D. in the reign of Mindôn Min and again in 1882-83 in Thibaw's reign due to the rise of dacoit *bos* Hla U and Yan Min and the general prevalence of crime, coinciding with a year of drought.

Since the annexation, years of scarcity have been frequent, but the only year of actual famine was 1891-92 when a bad season following on the poor harvest of the previous year brought disaster. "The railway was then opened only as far as Shwebo town and neither paddy nor rice was to be had in the outlying parts of the district, especially in the north where the failure of crops was worst. Famine works were opened in several centres, large sums were advanced to agriculturists, and extensive reductions of *thathameda* were made, but in spite of this the majority of the jungle population are said to have left the district. Whole families moved away, and in some villages not a soul was left behind. Numbers went to Katha to work on the Mu Valley railway, and numbers went southwards. When they reached Sagaing and Mandalay, children were given in exchange for a few *pyis* of rice in the hope that the children at any rate would be fed. The parents worked wherever they could get a job. Those who had any valuables reverted to the custom they had learned in Burmese times of leaving their houses at night and sleeping in out-of-the-way places for fear of being robbed, but there does not seem to have been more crime than usual. The distress is said to have been greater in the Ye-u than in the Shwebo District." A few village sites which were deserted at that time have been re-occupied thirty years later on the opening of the Ye-u Canal by the former occupiers or their descendants, who in the interval had been residing in Toungoo District. The year 1896-97 is said to have been as bad as 1891-92, but the railway was then in full working order and relieved the situation by bringing up rice. Test works were opened but few resorted to them, the great majority preferring the higher rates obtainable on the Mandalay Canal. Large reductions were made in the *thathameda* rates, and some villages were let off altogether. The year 1903-04 was a bad year and the question of famine works was considered

but works were not opened. The year 1907-08 was another year of scarcity, but owing to the introduction of the land revenue system in that year in place of *thathameda* no special measures were required to give relief in the matter of revenue payments, as automatic relief was afforded by the assessment of matured areas only. In recent times the year 1920-21 has been the year of greatest scarcity in the district. Failure of the *mogaung* paddy crop was general and coincided with a period when prices were rising throughout the province. It did not however prove necessary to open relief works. The situation was met partly by remission of *thathameda* and by a liberal issue of agricultural loans, but mainly by the readiness of cultivators to seek non-agricultural employment to tide over the period of stress.

Improbability of famine conditions arising.

Since the introduction of irrigation by major works the district as a whole has been self-supporting as regards food grains. In ordinary years there is a surplus of 130,000 tons of paddy available for export from the district, and in years of scarcity the canals ensure a rice crop sufficient to meet the requirements of the district and still leave a surplus for export. Even in the disastrous season 1920-21 and the poor year that succeeded it over fifty thousand tons of paddy or its equivalent in rice were exported by rail, while a quantity of probably not less than ten thousand tons was exported to adjoining districts by carts. A surplus rice crop in irrigated tracts is however of little use to cultivators in *mogaung* areas whose crops have failed unless they have the means to purchase it. Approximately only a little over a third of the cultivated area of the district is rendered secure by irrigation from major works. Over the remainder of the district, with the exception of a narrow strip of alluvial land along the banks of the Mu and Irrawaddy suitable for winter crops, and small areas in the north of Kyunhla Township and north-east of Kanbalu Township, where rainfall is ordinarily adequate, failure of crops so complete that seed is barely returned is not unknown, while partial failure of crops is the general rule. In the unirrigated portion of the district failure of crops in the future will probably be no less frequent than it has been in the past. Liability to failure may indeed increase with the denudation of tree growth following on the extension of *ya* cultivation. Leaving out of consideration large irrigation schemes that would utilize the waters of the Irrawaddy or the Chindwin, the only method whereby the effect of unfavourable seasons is likely to be minimised is the introduction of greater diversity of cropping in place of the present gamble on a single crop of rice. The year 1920-21 has however made it clear that widespread crop

failure, though it still causes much hardship, need not now be accompanied by famine conditions. The failure of crops in that year is generally considered to have been as complete outside canal irrigated tracts as in the year 1891-92, while it succeeded two poor seasons and was followed by two more. That action under the Famine Code was unnecessary is due to the improvement in economic conditions that has taken place in the last twenty years. It is possible that the *mogaung* cultivator's resources in the shape of accumulated capital have not greatly increased, but the extension of irrigation and improvement in communications have made it easier for him to find employment in periods of distress, while the spread of the co-operative credit movement has given him facilities for borrowing at a reasonable rate of interest. His cattle too are better protected against the evils of drought, as straw can usually be reaped without payment in canal areas.

There is a famine programme for the district which provides for the relief of 870,000 units on the construction of roads and tanks. Except in the event of a breakdown of the system of irrigation from major works it appears unlikely that it will ever have to be applied.

CHAPTER IX.

GENERAL ADMINISTRATION.

[Ad]ministrat[ion] under [Bu]rmese [rul]e.

A description of the Government and administration in Burma in Burmese times and of the duties and powers of the various officials is given in full in the Upper Burma Gazetteer, Part I, Volume II, Chapter XVI.

The Burmese *nès* or governorships, into which the area comprising the district was divided, were as follows :—

Yatanatheinga Myin nè occupying all the Shwebo subdivision except the small governorships on the river and Thabuttaw-Chauk-ywa and extending into Sagaing District well south of Sadaung. The ***Myin nè*** was governed by a ***Wun*** and was divided into about a dozen ***Myingaung***ships Under each ***Myingaung*** there were, in theory, ten ***Myinsis***, and under each ***Myinsi*** ten ***Ahmudans***. In actual fact, as, the ***Ahmudans*** were hereditary, the numbers tended to fluctuate, increasing in one village and decreasing in another and increasing in one ***Myinsi's*** charge and decreasing in another's. The ***Myingaung***ships were collected under three ***Myintat Bos***. There were also two ***Myin Sayes***. The ***Gaung***ships were frequently reorganised, and the list given

in Tharrawaddy Min's time bears little resemblance to the lists of Mindôn and Thibaw. In 1873 under the *Myauk-let-Yebet-Myintat-Bo* were Kawywa, Sibôktaya, Nyaungzin and Kanthaya *Gaung*ships; under the *Taung-let-Yebet-Myintat-Bo*, Hmetti Kawdaw, Thayaing, Thalôn and Hladaw, and under the Kunit-ywa *Bo*, Yôntha, Inbè, Kunit-ywa (Kadu), Thayasein (mostly in Sagaing District) and Pegu (wholly in Sagaing District). The map at the end of this volume gives an incomplete outline of the *Gaung*ships in 1881. The *Myingaungs* and *Myinsis* were appointed by the King. *Thugyis* were in charge of villages and were occasionally noted as being appointed *Myinsis* also. All the *Myin* officers had civil, criminal and fiscal powers, and such as remained in the district formed a sort of police force. The *Myin Sayes* were next in power to the *Myintat Bos* and had criminal powers if conferred upon them by the *Kayaing Wun* and, with the same authority, could try revenue and other cases. They collected the revenue through the *Myingaungs*. The *Myingaungs* had powers according to the trust placed in them by the *Kayaing Wun.*

Thabuttaw-Chaukywa, arbitrarily created for the benefit of one of the King's favourites, occupied part of Kin-u Township (to which it gave its name in the early days) and stretched down towards Shwebo. It was governed by a *Thenat-ôk*.

Thinkadaw Kayaing.—The foothills in the east of Kin-u Township and a few villages on the east bank of the Irrawaddy including Thabeikkyin, formed the Thinkadaw *Myothugyi*ship. The whole land was regarded as *Pa-a-nè-mye* as being dedicated to the upkeep of the Theinkadaw pagoda situated on a small island in the first defile.

Kyaukmyaung.—Mingala Kyaukmyaung, as it was called after Tharrawaddy Min resided there for a few months and proposed to make it his capital, was, with the neighbouring villages, under a *Myothugyi* dealing for some time direct with the Hlutdaw. It was also for some time under the Singu *Wun.*

Seinmaga and *Thitseingyi* were also for some time under independent officials.

West of the Mu river were :—

Tabayin, occupying the present Tabayin Township, the eastern and more thickly populated half of the Ye-u Township and a smaller portion of the Tazè Township south of the Tazè-Kaduma road, Yatana, Yathaya, etc. The villages of Tabayin were collected under *Thwethaukgyis*, who were in turn under two *Thin Thenat Bos.* These officials corresponded to the *Myingaungs* and *Myintat Bos* of the

Myinnè. Tabayin was governed by a *Wun* who resided some times at Tabayin and sometimes at Ye-u. He was assisted by two *Thenat Sayes*. Tabayin and Myedu to the north-east were occasionally governed by a *Hnit-Myo Wun*.

Like the *Gaung*ships the *Thwethaukgyi*ships were often changed. In 1876 there were twenty *Thwethaukgyis* at Chantha, Taunggwin, Linbyu, Zeyawadi, Nyaunglè, Thônsin, Wathè, Madaingbin, Kônbet, Ywameiktha, Paungdaunggu, Mindègôn, Nagabo, Hintha, Ywathitkyi, Nwamya, Mayagan, Taungbo, Myoma (Tabayin) and Myogyi.

Shwe-alè-gyaung; a group of smaller governorships, three of which, Shwe-ta-sè-thon-ywa (or Shwegyin *ta-sè-thôn-ywa*) Thissi-chaukywa and Seinnan, occupied the forest clad hills and sparsely populated area in the west of Ye-u and Tazè townships, that is, most of the Tamadaw or Shwegyin township, recently abolished, the remainder, Indaing, Mawkè, Mawdôn, Indauktha, Kyunhla, etc. occupying all the Kyunhla township west of the Mu. The *Alègyaung* was under a *Wun* and the smaller *nès* under *Shwehmus*. Indauktha was at one time under a *Nga-Myo-Wun* including Mawkè and Mawdôn and areas now in Katha. The inhabitants of the northern portion were Shans, and some at one time paid revenue in gold to the Shan principality of Mogaung until annexed in the 17th century by Nyaungyan Min. Thissi-chaukywa, Shwe-ta-sè-thônywa and Seinnan were in 1876 under the Tabayin *Wun* for a time. The first two had in fact originally been part of Tabayin *Wun*ship. The aborigines are said to have been Chins

Myedu occupied most of Tazè township and stretched across the Mu river over the part of Kyunhla Township which lies east of the Mu, and part of Kanbalu Township. Myedu was governed by a *Wun* with two *Sitkès* and two *Myo sayes*. It was at times, with Tabayin, governed by a *Hnit-Myo-Wun*.

Pyinsala-Nga-Myo and Tantabin in the north-east of the district occupied the bulk of that part of Kanbalu Township which lies east of the railway. excluding Malè, and running north into Katha District. The five *Myos* were Yatha, Hngetpyaw, Nyaungbin, Pintha, and Nagasin. Pyinsala and Tantabin were together governed by one *Wun* with two *Sitkès*, two *Nahkans* and two *Myosayes*.

Malè was governed by a *Myothugyi* whose jurisdiction covered a fairly large area in the foothills in the east of Kanbalu Township and stretched across the river including Sabènago.

Ngayanè and Kawthandi occupied most of the area between the Railway and the Mu River from a few miles

south of Myedu to a few miles north of Kabo. They were variously governed by two *Myosas* or one *Hnit-Myo-Wun* or by the Shwebo *Myin-Wun*.

The grouping and governorship of these areas varied from time to time and were subject to alteration at the royal whim. Shwebo, Tabayin, Myedu, Pyinsala and Ngayanè-Kawthandi were usually under separate *Wuns*. *Myothugyis* were in charge of the most important towns. Occasionally neighbouring villages were included in the *Myothugyi's* jurisdiction in which case there were subordinate *thugyis*. Independent *Myothugyi*ships have been mentioned. It is possible there were others, as, for instance, the Baw *Myothugyi*.

In 1881 King Thibaw divided the whole of Burma into ten districts or *Kayaings*, and the whole of the present Shwebo District, except Tabayin and the riverine *nè*, was included in the *Ninth Yatanathinga Kayaing*. This under the *Kayaing Wun* Bo Byin with the title of *She-windaw-hmu Yatanathinga Myo-Wun Yebet Myin Wun Thado Mingyi Maha Mingaung Yaza*, thus contained the Yatanathinga (Shwebo) Myo, Myedu Myo, Ngayanè Myo, Kawthandi Myo, Pyinsala Nga Myo and the Shwe-alè-gyaung. The Shwe-ashe-gyaung, Wuntho Myo and Kawlin Myo, in Katha District were also included. The *Kayaing Wun* had civil, criminal, revenue and military administrative powers. He had powers of life and death without appeal. On receipt of orders from the Hlutdaw for the collection and payment of revenue he issued orders to the *Wuns*, the Wuntho Sawbwa and the Myintat Bos of Shwebo.

Tabayin fell in the *Tenth Sagaing Kayaing* and the riverine *nès* were included in the *Upper River Kayaing*.

Military and Marine organization

Parts of the district were organized on the *daing* system and were divided into groups of households responsible for one member of the standing army at Mandalay or on service. These soldiers, who were formerly given lands to support them, were in Mindôn Min's reign, ordered to receive pay at the rate of Rs. 10 per month. But payment was very irregular and uncertain, and was supplemented by *nauktauk-kye*, a contribution made in money by the remaining households. The *nauktauk* for each palace guard and his family averaged about Rs. 30 a month, and, though strictly a voluntary contribution, not authorised by law, was latterly exacted by the local officials as if it were a tax. When the regiments went on service, as they frequently did in King Thibaw's time to serve in his fruitless wars in the Shan States, the *nauktauk* was naturally heavier. The soldier's family was retained at Mandalay as hostages, and the man himself had to be supported. So closely was military service

associated with the payment of *nauktauk* in the minds of the people of this district that over thirty years later, when men were recruited for the army during the Great War, they often succeeded in obtaining considerable sums from their co-villagers in addition to the bonus given by Government. It was not uncommon for recruits from this district to apply for leave from their regiment to return to their village to collect contributions that had been promised but had not been paid in full.

Tabayin, Myedu, Pyinsala-nga-Myo and Ngayanè-Kawthandi were not required to furnish permanent troops in Mandalay after the Padein *sa's* rebellion, in which the *ahmudans* of these districts joined. They were, however, liable to be called upon to supply troops in time of war or when the King required them. A revenue document dated 1871 shows that Tabayin was paying about Rs. 28,840 in *nauktauk* that year, presumably to troops on service (at about Rs. 4-12 per paying household, if the somewhat confused accounting is correctly interpreted), and Myedu men were found on garrison duty in the Shan States at the annexation. In peace time they formed a sort of police force which could be called out for the suppression of dacoity or other disturbance by the empowered official, the *Thwethauk*, as he was called in Tabayin, or the *Myingaung* in Shwebo, and his seniors.

The only troops supplied by the district to the Main Inner and Outer Infantry Regiments were about 300 musketeers under six *Thwethauks* from Thabuttawchaukywa to the *Myauk-Mayapin* Regiment, and a few odd members of other regiments. About half the total cavalry of Burma, however, were recruited from the Shwebo *myin nè*, including the small Pegu *myin-nè* now in the Sagaing District. These formed the *Yebet* and *Shwe bi-takun* Regiments, reputed to total about one thousand. Although known as cavalry, it seems that they possessed only some fifty ponies among them, the remaining men working on foot. The regiments were organized in Mandalay under a *Myintat Bo*, *Tathmus* commanding hundreds and *Thwethaukgyis* commanding fifties.

Some of the riverine villages found men for the war boats, which were manned by fifty men (*tet-swé*) captained by a *Pènin*, or chief steersman, under whom were *Pègyats*. Thitseingyi supplied one boat.

The *Bayingyis*, Christian descendants of captured Portuguese in Chantha, Mônhla and elsewhere, served in the *Mingala Amyauk*, the Artillery.

Various miscellaneous regiments also received men from the district. The *Kalabyo* and *Kinda* Regiments of about

400 were partly recruited from Myedu jurisdiction. Mabe, 4 miles east of Shwebo, supplied a few *Daingthas*, personal shield-bearers to the King, to the *Daing* Regiment.

Other *Ahmudan*

Numerous villages had to render service in other ways, and those sending ***ahmudans*** to Mandalay paid ***nauktauk*** in the same way as those supplying soldiers. Eighty *Mingala Let Swè*, Yeomen of the Guard, gentlemen-at-arms who carried arms in procession before the King, were from Shwebo and a few surrounding villages. The *Palaing-Let-Swe*, similarly employed, were from Palaing The twelve *Tagabos* warders or turnkeys, who were in charge of the twelve gates of the palace, were from Thamantha. The Yun and Kaunghan Shan settlements along the Mu were under the *Wuns* in whose jurisdiction their land fell, while the *ahmudans* they supplied at Mandalay formed corps of lictors under the Yunsu and the Kaunghan Wun respectively. Kin-u Myothit, Tèdaw and Sibôktaya, which had opposed Alaungpaya when he was fighting the Talaings (see Chapter II) were for this reason called upon to find men, who were not paid, to act as messengers and guards at the Hlutdaw. They supplied, all told, about fifty. Chiba and Seikkun found *po-ahmudans*. These were given silk which they had to weave for the King and his Queens and Court. Sheinmaga rendered service to the Queen as ***Mahayindaw-tan***. They carried the ***Nanmadaw-Mipaya***. About fourteen men were on duty at Mandalay at one time. They ceased to render service when *ahmudans* began to receive monthly wages in Mindôn's reign. Halingyi and Kanthaya supplied *Sidawthas* who sounded the time at the palace. This service dates from Alaungpaya's time. This list is by no means exhaustive.

Organization of the district after the annexation.

Although Shwebo was occupied at the end of December 1885, and Ye-u at the beginning of May 1886, and although both areas were given the status of districts at once, with civil officers as Deputy Commissioners in control, the disturbed state of the country, much of which remained for some months in the hands of dacoit bands, prevented the introduction of regularly organized administration during 1886.

A printed note by the Chief Commissioner dated 18th August 1886 gives some idea of the first attempts to administer Shwebo. According to this note the following Burmans were employed :—Maung Tun (son of Maung Shwe Byin, the Shwebo Wun), *Myoôk* of Shwebo township on a salary of Rs. 150 a month ; Maung Sa, *Myoôk* of Chaukywa on a similar salary ; Maung Sa's son, *Ôk* of Chaukywa on Rs. 50 a month, and eleven *Myingaungs* on Rs. 50 a month

each. The arrangement for giving salaries to the *Ôk* and the *myingaungs* is described as being only temporary, it being intended that they should become circle *thugyis* and receive commission on the revenue collected by them. The amount of the revenue collected is not given, but the Shwebo township under Maung Tun already had three *Myothugyis*, at Sheinmaga, Kyaukmyaung and Sèwin.

In Ye-u district, the *Thwethaukgyi* of Madaingbin Maung Aung Gyi (later K.S.M.) was made *Myoôk* on Rs. 150 a month, and two *Thwethaukgyis* on Rs. 50 a month were temporarily appointed. It was hoped that the latter could later be paid from the *thugyis'* commission on the revenue.

The northern part of the district had not yet come under full control, but two appointments had been made which were to take effect from the date on which the officers took up their appointments. These were the old *Wun*ships of Pyinsala and Myedu, and the officers appointed were the former *Wuns*, who were to become township officers. The part of Myedu west of the river Mu, and also the small tract called Indauktha, west of the Mu, were apparently intended to form part of the Shwebo District.

This arrangement was not entirely carried out, for in January 1887 four townships including part of these trans-Mu areas were defined as forming the Ye-u District. Since the definition gives the names of some of the old Burmese tracts it is worth recording.

1. Nabeikkyi (Nwabetkyi): The tract known as western Myedu, the tract formerly administered by the *Thwethauk* of Madaingbin, and the tracts of Indaing, Thitse-chaukywa, Nanwindaw, Sunan (Seinnan) and Kyunhla.

2. Mayagan: The tract known as southern Tabayin, including the tracts formerly administered by the *Thwethauks* of Namya, Hintha, Taungbo, Ngabo, Mindegon, Kyi, Myoma and Myogyi.

3. Kunôn: The tract known as northern Tabayin including the tracts formerly administered by the *Thwethauks* of Sanswe, Ywathitgyi, Nyaunglè Taunggwin, Wathe, Linbyu, Paungdaunggu, and Zeyawaddi, and the Shwegyin Shwehmuship.

4. Ye-u.—The town of Ye-u, and the tracts formerly administered by the *thwethauks* of Konbet, Ywameiktha and Chawthit.

In addition to the *Myooks* of these four townships the *Myothugyis* of Tazè, Tabayin, and Ye-u were appointed to be magistrates.

In October 1887 an additional township was formed out of the Nwabetkyi township, and called the Indaing township.

In January 1889 three subdivisions were formed in Ye-u district, the Northern, headquarters Tazè, comprising the Indaing and Nwabetgyi townships, the Central, headquarters Ye-u, comprising the Kunôn, Ye-u, and Shwegyin townships, and the Southern consisting of the Mayagan township only. This arrangement was revised in July of the same year, the Central subdivision being abolished. The Indaing, Tazè, and Shwegyin townships went to form the Northern subdivision, Nwabetgyi disappearing, and Ye-u, Kunôn, and Mayagan going to the Southern subdivision.

In July 1890, the Shwegyin township was transferred to the Southern subdivision, and the Kunôn township abolished, while in August 1891, consequent on the deposition of the Wuntho *Sawbwa* and the fusion of the bulk of his state with the Katha district, the tract south of the Nanbayan *chaung* was added to the Indaing township.

The fact that the country was settled and peaceful caused proposals to be initiated in 1893 for the abolition of the Ye-u district, but one of the main objects of the amalgamation with the neighbouring districts was to release funds for the better control of the northern frontier of the province by the establishment of the new district of Myitkyina. In the original scheme it was proposed that the northern half of the district should go to the Kanbalu subdivision of the Shwebo district and the southern half to the Lower Chindwin. This arrangement was not however adopted, and the whole of Ye-u district was added to Shwebo in March 1895.

Turning to Shwebo, we find that the first tentative arrangements had to be abandoned, and in April 1887 the district was declared to comprise the three subdivisions of Tantabin, consisting of the Myedu, Tantabin (or Pyinsala) and Chaukywa townships, Shwebo and Sheinmaga, each consisting of one township only.

In May of the following year, Tantabin subdivision was reduced to two townships, Myedu and Malè, the subdivisional headquarters being at Myedu. Chaukywa was added to Shwebo subdivision, and a new township, Hladaw, was formed in the Sheinmaga subdivision.

In February 1891, Kanbalu became the headquarters of the Tantabin subdivision, the construction of the Mu Valley railway making this change necessary, and in December of the same year, after the Wuntho rebellion, the Pintha and

South Nagasin circles were added to the Myedu township, the northern boundary of the district thus receiving its present form.

In July 1893, the Sheinmaga subdivision was abolished, Hladaw township amalgamated with Sheinmaga, and the reconstituted township added to Shwebo subdivision.

On the abolition of the Ye-u district in 1895, the Shwebo district was organized into the three subdivisions and ten townships given below:—

Subdivision.	Headquarters	Township.	Headquarters.
Shwebo ...	Shwebo ...	Shwebo ...	Shwebo
		Chaukywa ...	Kin-u
		Sheinmaga ...	Sheinmaga
Tantabin ...	Kanbalu ..	Myedu ...	Kanbalu
		Malè ...	Malè
Ye-u ...	Ye-u ...	Ye-u ...	Ye-u
		Mayagan ..	Tabayin
		Shwegyin ...	Tamadaw
		Tazè ...	Tazè
		Indaing ...	Kyunhla

The only changes since 1895 have been the transfer of the Sheinmaga township headquarters to Wetlet on the railway line, the abolition of the Malè township and its incorporation with Kanbalu and Kin-u township, the transfer of a few tracts of Kanbalu township east of the Mu to Indaing (Kyunhla) township, the transfer of the Indaing (Kyunhla) township from Ye-u to Tantabin (Kanbalu) and the renaming of all subdivisions and townships by the name of the headquarters town of each. Tamadaw township of the Ye-u subdivision was abolished in 1922 and split up between Tazè and Ye-u townships.

The present organization of townships is :—

Subdivision	Township.
Shwebo	Shwebo.
	Kin u.
	Wetlet.
Kanbalu	Kanbalu.
	Kyunhla.
Ye-u	Ye-u.
	Tabayin.
	Tazè.

ies. The Ye-u subdivision is bounded on the north by the Yabin *chaung* from its junction with the Mu on the east to the confluence of the Yinyein and Seinnan *chaungs* on the

west. From the latter point to the district border the boundary leaves the *chaung* and cuts across the low hills westwards. On the east the Mu forms the boundary throughout its whole length. The internal boundaries of the townships in the Ye-u subdivision are almost purely arbitrary.

The northern boundary of the Shwebo subdivision runs for part of the way along the small Ketlan *chaung*, but for the most part is an irregular line not following any well-defined natural feature. The western boundary is the Mu. The boundaries between the Kin-u and Shwebo and between the Shwebo and Wetlet townships are arbitrary.

The Kanbalu subdivision stretches right across the whole northern half of the district on both sides of the Mu. This subdivision in actual area covers almost half of the district, but the population, except along the Mu and the railway line, is very sparse, Kanbalu having 54,560 and Kyunhla 14,946 persons only, a total of 69,509.

For Ye-u, the population by townships is Ye-u 32,582, Tazè, 36,838, Tamadaw 25,666, Tabayin 54,862, a total of 149,948.

For Shwebo, the township populations are Shwebo 63,104, Kin-u 45,090, Wetlet 63,636, totalling 171,730.

Village Administration

The indigenous system of village administration was taken over as it stood at the annexation, although many headmen, who had deserted their villages during the period at which they were most needed and in other ways proved themselves unsatisfactory, were not appointed.

The *Myothugyis*, *Myingaungs* and *Thwethauks* who were found to be sound men were, as mentioned above, given a small temporary salary and retained as headmen of circles in the hope that they might later be rewarded by a percentage of the subordinate headmen's commission. From the first, however, it was the settled policy of government to break up these circles into village-tracts under independent headmen as opportunity occurred In 1889-90 there were as many as 14 circle headmen in Shwebo and 40 in Ye-u, and charges were very irregular in size, one headman in Shwebo having 85 villages under him. By 1901 this number had been reduced to 14 circle headmen receiving the entire commission throughout their circles and one receiving full commission in his own village and a share of the commission in subordinate villages. In 1902 nine of these circles were abolished, and by 1916 only the *myothugyi* of Myemum, who still receives the entire commission of his circle, remained. The number of headmen receiving no commission has simultaneously fallen from 95

in 1901 to 6 in 1922. The total number of headmen, by the amalgamation of the smaller tracts, has slowly been reduced from 735 in 1901 to 625 in 1922, while the number of headmen receiving full commission, which had steadily risen from 615 in 1901, to 644 in 1914, owing to the breaking up of circles, has since that date simultaneously fallen to 619 in 1922. The average commission of headmen is Rs. 210, a figure which is only exceeded in Sagaing, Minbu, Pyapôn, Insein and Hanthawaddy districts. This average commission, however, is not evenly distributed throughout the district, headmen in the canal areas who collect both water rate and land revenue receiving much larger emoluments than those in *mogaung* tracts. There are several who receive over Rs. 1,000 per annum.

The number of headmen exercising special criminal and civil powers under sections 9 (4) and 6 (1) of the Village Act has increased from 19 and 12 in 1901 to 36 and 33 in 1910, and 94 and 104 in 1922. The Deputy Commissioner remarks that the post is wanted more for its honour and glory than for its enhanced opportunities of public service. There are few civil cases tried by headmen, though headmen are continually being urged to use their powers more.

Total fines inflicted by headmen, which decreased from Rs. 5,000 in 1900 to Rs. 3,000 in 1901 and Rs. 2,000 in 1902 in consequence of insistence on moderation, averaged Rs. 3,000 till 1910 and have since varied between Rs. 7,000 and Rs. 10,000 per annum.

For the suppression of cattle theft eleven villages were fined during the three years 1902-03 04 under the Track Law, but, in spite of cattle theft still being rife, no further action was taken under this section until 1911. The Commissioner of Sagaing Division says : "The Track Law is not the simple business it used to be 25 years ago. In those days one could gallop along the track of the raided herds. At the present time one or two head of cattle are stolen from the grazing ground, which in Upper Burma means the scrub-jungle. When the animal was taken, and in which direction it has been carried off, no one can say, and it is therefore impossible to use the Track Law except in isolated cases." In 1911 one village was fined, in 1912 four, in 1913 two (a total fine of Rs. 1,290). and in 1915 and 1919 one only. Fines other than under the Track Law have been inflicted on a few villages every year, by far the highest number in one year being in 1906, 20 villages (Rs. 1,477 total fine), and in 1907, 14 (Rs. 2,357 total fine). These were largely fines on villages suppressing evidence in cases

where telegraph insulators were broken and other wanton damage caused to Government property. The heaviest fine in twenty years has been a total of Rs. 3,540 on two villages in 1910 As there are no detailed records, the incidence of the fine is not known. There were no fines in 1920, three in 1921, and one, on account of the suppression of evidence in a murder case, in 1922.

Two or three years after the annexation a proposal was made in Ye u district that the priesthood should be regulated and *Gaing-ôks* should be appointed whose monastic jurisdiction would be conterminous with subdivisions. Thus the Wethaw *Sayad w* would have been given authority over the south subdivision, including Ye u, and the Gwegôn *Sayadaw* over the north. Under the *Gaing-oks*, *Gaingdauks* were to be appointed with jurisdictions of *Thwethauks*. Nothing came of the proposal.

The civil administration of the district is in the hands of the Deputy Commissioner for the district, three Subdivisional Officers, who are usually either Assistant Commissioners or Extra Assistant Commissioners for the subdivisions and eight Township Officers, who are usually Myooks, for the townships. **Civil Administration.**

The Deputy Commissioner is *ex officio* District Magistrate, Revenue Collector under the Land and Revenue Regulation, the Stamp and Excise Acts, Collector of Income-tax, Registrar, and inspector of Factories.

The Revenue Department of the Deputy Commissioner's Office is superintended by an *Akunwun* who is usually a Myoôk. In the Land Records Department work is extremely heavy, and the Superintendent has usually two Assistant Superintendents to help him. Revenue administration is dealt with in Chapter X.

For Excise purposes the district forms part of the charge of the Superintendent of Excise, Katha. There is no Excise official in the district. The nearest opium shop is at Katha.

There is a District Treasury in charge of a Treasury Officer, who is also Headquarters Magistrate, and a Subtreasury at each township headquarters in charge of the Township Officer.

The institution of District Council and Circle Boards has relieved the Deputy Commissioner of direct responsibility for the control and expenditure of the District Fund including the management of bazaars slaughter houses, and ferries, which are the main sources of revenue and the maintenance and improvement of communications, on which the bulk of the fund is spent. (See Chapter XI.)

Departments not under the Deputy Commissioner's direct control.

Departments not under the Deputy Commissioner's direct control are Public Works, Irrigation, Forests, Education, Posts and Telegraphs, Veterinary, Hospitals and Jails.

In the first seven of these departments the district falls within the following circles and divisions :—

(i) North East Circle of the Public Works Department, Roads and Buildings Branch, within which Shwebo is the headquarters of the Shwebo Division with four subdivisions: Headquarters, Ye-u, Sagaing and Ruby Mines, stretching over the whole of the Shwebo and Sagaing Civil districts and the Mogôk subdivision of Katha district. (See Chapter III.)

(ii) The Northern Irrigation Circle, within which Shwebo is the headquarters of the Shwebo and Ye-u Canal Divisions : the first with three, and the second with two subdivisions. (See Chapter IV.)

(iii) The Chindwin Forest Circle within which Shwebo is the headquarters of the Mu Division, with five Ranges: Ye-u and Kyunhla in this district, and three in Katha district; and the Shwebo Division with four Ranges: Shwebo and Kanbalu in this district and two in Katha district. The forests west of the Mu-Chindwin divide are in the Lower Chindwin Division. (See Chapter V.)

(iv) The Sagaing Education Circle, in which Shwebo is the headquarters of Shwebo (A) Sub-circle, and Kanbalu is the headquarters of Shwebo (B) Sub-circle. (See Chapter XII.)

(v) The Northern Postal Division, of which Shwebo is the headquarters, with two subdivisions: Shwebo for Shwebo and Ruby Mines (Mogôk) and Myitkyina for Katha, Myitkyina, Bhamo and Putao. (See Chapter VII.)

(vi) The Mandalay Telegraph Division. (See Chapter VII.)

(vii) The Sagaing Division of the Veterinary Department within which Shwebo is the headquarters of an Inspector's charge, with a Veterinary Assistant for each Township. (See Chapter IV.)

Hospitals are dealt with in Chapter XIII.

Police, Criminal Justice, Civil Justice, Jails and Registration remain to be dealt with below.

Some account of the Military and Military Police will first be given. The total of Military and Police Forces including the Civil Police was at its highest in 1888, when it was 2,900 ; 1,650 in Shwebo district, and 1,250 in Ye-u district. By 1910 the numbers had been reduced to 1,750, and by 1920 to 1,600. In 1923 there were 500, of which 394 were Civil Police. *

* Further reductions have since been made .

The first garrison of Shwebo forced it away into the town on 23rd December 1885, and from there the first garrison for Ye-u marched out on 1st May 1886. Military.

The distribution of the garrisons in the two districts in June 1886 was as follows:—

At Shwebo—

	Officers.	Other ranks.
No. 9 Battery, 1st Brigade Cinques Ports Division, Royal Artillery ...	2	25
1st Battalion, Royal Welsh Fusiliers ...	1	173
2nd Madras Lancers ...	1	16
5th Battalion, Bombay Light Infantry ...	1	112
Madras Sappers and Miners	...	4

At Ye-u—

	Officers.	Other ranks.
1st Battalion, Royal Welsh Fusiliers ...	1	63
2nd Madras Lancers ...	1	15
21st Madras Infantry ...	2	154
Madras Sappers and Miners	...	25

At Kyaukmyaung (established early to protect communications with Mandalay.)—

	Officers.	Other ranks.
1st Battalion, Royal Welsh Fusiliers	...	31
5th Battalion, Bombay Light Infantry	...	62
12th Madras Infantry ...	1	71

At Sheinmaga (established in May in consequence of Nga Yaing's activities and shortly taken over by the Sagaing Command)—

	Officers.	Other ranks.
5th Bombay Light Infantry	1	113
Madras Sappers and Miners	...	15

In the early days the troops in Shwebo were encamped among the *pôngyi-kyaungs* east of the moat near the present Deputy Commissioner's house and the Club. A site for Cantonments was selected north-east of the town, and in 1889 90 six half-company barracks and family quarters for a battalion of British Infantry, a hospital and quarters for British Officers were erected. Various other buildings were added, and during the next two years roads were metalled and trees planted along the sides. In 1892 the improvement of the water-supply was undertaken, and this was completed in 1897. The site has always enjoyed a

reputation as a healthy cantonment. The following is a list furnished by the Quartermaster-General in India (unfortunately incomplete as full records are not available) shewing the regiments that have been stationed at Shwebo. Shwebo Cantonments were vacated in March 1921 —

British Units.

2nd Battalion, Prince of Wales' Yorkshire Regiment ...	1893-1895
2nd Battalion, Essex Regiment ...	1900-1901
1st Battalion, East Kent Regiment	1901-1902
1st Battalion, East Yorkshire Regiment	1003-1906
2nd Battalion, King's Own Royal Lancaster Regiment	1906-1908
2nd Battalion, The Royal Welsh Fusiliers	1908-1911
2nd Battalion, East Surrey Regiment	1911-1914
Wing, 2/5th Battalion, Somerset Light Infantry	1915-1917
Headquarters and two Companies, 1st Garrison Battalion, Royal Irish Fusiliers.	1917-1918

Indian Units.

91st Punjabis	1892-1894
Two Companies, 89th Carnatic Infantry	1915-1919
Headquarters and two Companies, Carnatic Infantry	1919-1919
4/70th Burma Rifles	1919-1921
Depôt, 1/70th Burma Rifles	1920-1921

Military Police. The first batches of the Military Police levy arrived in Shwebo on 28th May 1886, and in Ye-u about the same time, unmounted and for the most part untrained. Those for Shwebo numbered 69, of whom only 8 were trained men and those for Ye-u, 111, of whom 15 were trained men. Ponies were to be purchased in the districts. By the end of 1887 the Shwebo and Ye-u Battalions, as they were then designated, numbered 181 and 118 all ranks, respectively. In 1888 the numbers were 686 and 499; in 1889, 775 and 645. During these years their duties were purely military and there were many encounters with dacoits. By 1890 all dacoit bands had been broken up, but the Military Police numbers were not reduced until after the Wuntho rebellion, when, in December 1891, the Shwebo Battalion posts were taken over by the Mandalay Battalion, the latter Battalion

remaining at its former strength. In 1893 Ye-u district was added to the Lower Chindwin Battalion command, the Ye-u Battalion being absorbed, and numbers remaining the same. In 1894 the Lower Chindwin Battalion took over the Shwebo posts, reducing the posts in Ye-u, Sagaing and Mônywa for this purpose. The strength of the Lower Chindwin Battalion in these four districts was then 1,127. In 1895 the Ye-u district was abolished, but the command remained the same. In July 1900 the new Shwebo Battalion was formed with headquarters at Shwebo. The command embraced the Shwebo, Sagaing and Katha districts. The strength was just over one thousand, about half being in Shwebo district. By 1905 the number had dropped to 910, or one man per 14·70 square miles of area served and one man for every 756 of the population. In 1911 the Battalion strength was 1,066; 412 being in Shwebo district. By 1920 the total strength had fallen to 698. On 1st March 1923 the Battalion was disbanded, and its posts were taken over by the North-West Border Battalion which at present has three posts with a total strength of one Assistant Commandant and 125 other ranks in the district.

Besides headquarters at Shwebo the posts occupied by the Shwebo Battalion in 1891 were fourteen, *viz*., Myemun, Tantabin, Mèthè, Kanbalu (over 30 in strength), Myedu, Ywatha, Kyaukmyaung (over 20) and Thityabin, Magyigôn, Zigôn, Kin-u, Paukkan, Myindaw and Okpo (under 20). Shwekugyi, Taukashat, Ônbauk, Ywathit, Kabwet, Kawthandi, Nyaungbintha, Malè, Sheinmaga and others had previously been occupied but had been abandoned or handed over to the Civil Police. Consequent on the annexation of the Wuntho State in this year the posts in the Katha district as far north as Kawlin were also occupied by the Shwebo Battalion. In 1893, after the Mandalay Battalion had taken over the district, only Shwebo, Kanbalu, Letpanda, Mèthè, Pazi, Sheinmaga and Zigôn (Tantabin) were occupied. In Ye-u district in 1891 there were 10 posts: Yabin, Paluzawa, Kyunhla, Tabayin, Mayagan, Ôkshingyi, Nabetgyi, Yebôn (moved to Nanwindaw) and two others. The last four named were abandoned during the year for Ainggyi, Chaungzauk and Naunggauk (moved to Thekkègyin) on the Wuntho frontier. Paungdaunggu, Nagabo and Kunôn are among the other posts occupied on previous occasions. Posts.

The Shwebo Battalion raised in 1910 has had posts at Shwebo, Ye-u and Kanbalu only. In 1911 the strength of these were: Shwebo—10 Subadars and Jemadars, 20 Havildars, 10 Naiks and 285 Sepoys, totalling 325; Kanbalu—

1 Jemadar, 1 Havildar, 1 Naik and 19 Sepoys totalling 22, and Ye-u—1 Jemadar, 3 Havildars, 5 Naiks and 56 Sepoys totalling 65: grand total 412. In 1923 these were reduced to Shwebo; 5 Subadars and Jemadars, 5 Havildars, 2 Naiks, and 52 Sepoys totalling 64; Kanbalu, 1 Havildar, 1 Naik and 23 Sepoys and Ye-u, 1 Havildar, 1 Naik and 14 Sepoys; grand total 105.

ctive ervice.

The military and semi-military operations of the early years after the annexation have been outlined in Chapter II. In 1888 and 1889 numerous encounters with dacoits occurred in the two districts, notably at Myohla, where the military police acted in concert with 20 mounted infantry of the Cheshire Regiment, and at Ywatha in Shwebo district, and at Saga, Mayagan, Madaunggyi and Saingbyin in Ye-u district. Setbacks were not numerous. In July 1888 a ration party was ambushed between Kabwet and Kanbalu. In the same year a disaster occurred in Ye-u district where, in contravention of the orders of the Chief Commissioner, a small picket of 10 men were put out at Ywashe village on the edge of a forest in a building exposed to attack and without proper stockading. The picket was surprised by a gang of dacoits and six of the picket were killed and two wounded. One snider rifle was taken by the dacoits who were driven off by the arrival of mounted military police from Saingbyin distant two miles.

In 1890 the only engagement reported was the setting on fire of Kyunhla post by dacoits, who escaped. Armed bands no longer existed.

In 1891 the Shwebo Military Police took a prominent part in the suppression of the Wuntho rebellion. Captain (now General) Keary's march and subsequent rout of the rebels at Kawlin with but a handful of men practically nipped the rebellion in the bud. The Ye-u Battalion also took part, Captain Hutchinson, the Battalion Commandant, being mortally wounded at Muna.

Military Police were called out from the Ye-u post in 1907 to suppress the abortive Sèdaw rising, after which the Ye-u post was increased by twenty men.

To reinforce the Military Police at Myinmu on the occasion of the rising of Maung Than in 1910 two Indian officers and 69 other ranks were sent from Shwebo, and in 1911 punitive posts were established at Pegu (Sagaing) and Shwebangôn (Wetlet township) of 23 rifles each.

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The cost of the Battalion in 1891 was, Shwebo, Rs. 2,44,607, Ye-u, Rs. 2,05,895. In 1897 the Lower Chindwin Battalion comprising Lower Chindwin, Sagaing and Shwebo districts, cost Rs. 2,65,794. In 1905 the Shwebo Battalion

comprising Sagaing, Shwebo, and Katha districts cost Rs. 2,55,176. This rose to Rs. 2,87,771 in 1920. About 50 per cent. of this concerns Shwebo. Figures for cost for this district under the new organization of battalions are not available, but the strength has decreased by 75 per cent. with corresponding reduction in cost.

The raising of a Civil Police force was undertaken in 1887 for the detection of crime and to act in concert with the Military Police. At first their duties were almost military, and at this they excelled. It was many years before they could be said to be carrying out their civil duties of investigation and detection of crime with any degree of efficiency. Most, if not all, of the men in Ye-u district were mounted. They were armed with Enfield rifles which the District Superintendent of Police was most anxious to exchange for snider carbines, the impossibility of reloading the Enfield on horseback being the objection to the weapon. It was a head constable and 28 men of this force that in 1888 captured the camp of Nga Mye Gyi, the *Bo Gyôk*, a dacoit of renown under Burmese rule, the last surviving leader of the annexation times. This was only achieved after a sharp fight in which *Bo* Myè Gyi was killed. There were many other illustrations of the courage of the force to face dacoits and fight them. The weak point for many years was lack of discipline. There was a tendency to leave the force when the ploughing and harvest season came on. Civil Police.

In order to teach the men to act independently from the first and not to rely on the support of the Military Police, an early attempt was made to establish them in independent posts. Before the end of 1887 there were 10 such posts in Ye-u district, though only one had been established in Shwebo district. At the commencement of 1888 the experiment of placing men in lines at headquarters, giving them charge of their own lock-up, stores, arms, ammunition, treasure, etc., and making them wholly responsible for the keeping of the same was attempted. The Burmans found it irksome, but soon came to understand and appreciate the trust. There were no escapes from Burman headquarters cages and no loss of arms, ammunition and treasure. The present Civil Police lines were built in 1892-93 at a cost of Rs. 39,500.

The force is recruited and trained locally, training schools having been first opened in Ye-u in 1890 and in Shwebo in April 1893. Figures for the earlier years are not available, but in the years 1910 to 1915 there seems to have been great difficulty in keeping the force up to sanctioned strength. Resignations from the force in 1914 owing

to discontent numbered 32, the majority from Shwebo town. This the District Superintendent of Police attributed largely to the expense of living in Shwebo and the unpopularity of headquarters work. Police and village headmen were urged to seek for recruits, and in 1916 the force was up to sanctioned strength. In 1922 it was 13 below strength. In 1923 there was a waiting list. On the outbreak of war in 1914 Civil Police were called upon to take the place of Military Police in many duties such as escort duties over treasure and prisoners, there having been demands for the Military Police outside the district. The Commissioner commented on the efficiency with which these duties were performed.

Strength. In 1888 the force consisted of 1 District Superintendent of Police, 1 Assistant Superintendent of Police and 307 other ranks in Shwebo district, and 1 District Superintendent of Police, 1 Assistant Superintendent of Police and 258 other ranks at Ye-u. Of these 3 in Shwebo and 114 in Ye-u were mounted. In 1891 the force had increased to 407 other ranks in Shwebo (70 mounted), and 278 in Ye-u (126 mounted). In 1895 consequent on the amalgamation of the districts the numbers were reduced to 1 District Superintendent of Police, 2 Assistant Superintendents and 525 other ranks. In 1900 the strength was 1 District Superintendent of Police, 2 Assistant Superintendents and 475 other ranks. Since 1905 there have been no Assistant Superintendents of Police stationed at Shwebo. The sanctioned strength has gradually been reduced, and is now 1 District Superintendent of Police and 400 other ranks. There are now 20 mounted men, a decrease from the numbers recently employed, 41 in 1911, 50 in 1916, and 48 in 1918. The proportion of police to the area of the district is one man to every 14·25 square miles and to population one man to 975 persons. There are 26 Indian Police appointed for employment among the Indian population. They are not of a good type.

Cost. The total cost of the police decreased from Rs. 1,86,889 in the two districts in 1891 to Rs. 1,46,308 in 1895 and Rs. 1,13,342 in 1900. Since then owing to improvement in pay it has risen steadily, and in 1922 was Rs. 1,85,337.

Posts. In 1910 there were 18 police-stations and 10 outposts. This had been reduced to 15 police-stations and 11 outposts in 1915 and the number is now 14 police-stations and 4 outposts. The police-stations are at Shwebo, Kyaukmyaung, Kin-u, Sheinmaga, Wetlet, Ywatha, Kanbalu, Kyatthin, Zigôn, Kyunhla, Ye-u, Tabayin, Mugan and Tazè. Shwebo, Kanbalu and Ye-u are armed police-stations.

The beat patrol system found early favour in the district and was in working order in 1891. Up to the end of 1923 patrols visited all the important villages and a number of cases yearly may be credited to them. They collected the vital statistics in all villages. The abolition of the beat patrol system at the end of 1923 has synchronised with a startling increase in crime not only in this district but throughout the Province. Whether this is merely a coincidence it is too early to decide. **Beat Patrols.**

River patrols were employed to patrol the river in the early years after the annexation and were of much value in preventing dacoits from crossing the river and evading their pursuers. These were not from district establishments. **River Police.**

The railway police is a separate force. It was created in 1890. Its jurisdiction is confined to railway lands. Shwebo is the headquarters of an Inspector. **Railway Police.**

In May 1888 one Head Constable and 10 Constables were quartered on the village of Pindin, a village four miles from Kin-u, as a punitive force for one year. The residents of this village persisted in assisting the dacoits with information, arms, money and food. **Punitive Police.**

In June of the same year it was found necessary for the punishment of a few disaffected villages in the extreme south of the district, and for the protection of the neighbouring loyal villagers against the dacoit leaders Nga Yaing and others whom the disaffected villages persisted in befriending, to quarter 1 Head Constable and 2 Sergeants and 28 men in the villages.

In 1911 a force of 1 Havildar, 2 Naiks and 20 Sepoys was imposed on the villages of Shwebangôn, Hladaw, Thayetkyo North, Thayetkyo South, Pyun-u and Thabaukkôn, all on the southern border of the district in Wetlet Township for two years at a total cost of Rs. 19,993 on account of the complicity of the inhabitants in the Myinmu rising of 1910. These were withdrawn after one year, as the Shwebo villages were proved to be far less guilty than those in Sagaing and Lower Chindwin districts.

In 1915 a force of one Inspector of Police and three Constables costing Rs. 3,370 was quartered on the village of Nyaungbingyidaw. The village had long had a bad reputation. It was full of thieves and bad characters who committed crimes in other villages. These culminated in two dacoities towards the close of 1914.

One of the celebrated dacoit Bo Yaing's contemporaries and lieutenants was Tha Pwe. Three of his sons, still alive, carried on their father's work, together with a large **Criminal Tribe.**

number of villagers from the Sheinmaga locality and the neighbouring villages of Mandalay and Sagaing districts. By this time dacoity had deteriorated to the class of crime met with now, but there is no doubt that it was a survival of the turbulence of the annexation days continued by descendants of the old "patriots." Not until 1919 was combined action by the three districts taken, leading to about 30 of the worst being gazetted as a Criminal Tribe, with the restrictions and penalties which that means. Since then, practically without exception, they have kept quiet.

Crime.

True Cognizable Offences reported to the Police, 1913 to 1922.

Year.	All cognizable offences (except offences under special and local laws declared cognizable and public nuisances).	Murder and attempted murder.	Dacoity	Robbery and house-breaikng sections 458 to 460, I. P C.	Ordinary house breaking.	Cattle theft.
1913	1,232	3	...	9	65	52
1914	1,136	10	1	6	95	56
1915	1,133	9	1	9	90	65
1916	1,161	4	1	8	85	44
1917	1,016	9	2	3	80	47
1918	1,109	14	1	11	94	36
1919	1,143	14	5	12	112	54
1920	1,332	17	4	16	115	45
1921	1,255	19	4	14	157	80
1922	1,235	15	2	15	126	51

As the table above shows, crime in the district is comparatively light. The worst centres are probably Shwebo town and Wetlet township. The figures for violent crime have decreased largely since the early years after the

annexation. Thus in 1889 the total number of dacoities and robberies in the two districts was 125. Many of these offences were however committed by men from Wuntho. Since 1919 there has been a tendency for the number of violent crimes to increase. The total number of dacoities is however insignificant. According to the District Superintendent of Police many of the robberies are quite unpremeditated. " A lot of them are highway robberies on bazaar women, carts, etc., carried out in a spirit of mischief or under the influence of drink. The spiritual exaltation that the local reputation of a "*lu mike*" raises in the breast of a young Burman, also turns him to this sort of crime. It is too an easy way of recouping petty gambling losses. Failure to detect such cases leads to an increase, as there are usually plenty of young hooligans ready to imitate anyone who has committed a robbery with impunity." In a district in which there are nearly 350,000 head of cattle the figures for cattle theft are not high. In the early days the district was notorious for this form of crime, and following on the famine in 1891-92 the figures for 1892 and 1893 were 246 and 280 cases respectively. The existence of a fairly important gang was discovered in 1921, but now a days organized theft by gangs has almost disappeared. One man was recently convicted of nine different thefts of cattle, of which only the last was reported to the Police.

Preventive Sections.

Figures for convictions under the preventive sections for 1889 and the following years were 11, 2,0, 8,1 and 6 in Shwebo, and for 1890 onwards in Ye-u 139, 7, 1, 0 and 4. The number in 1889 is not recorded. The following explains the large 1890 figure :—" There is a very large increase in the number of persons conditionally released on security under executive orders. The quiet behaviour of these released dacoits is remarkable." From 1895 onwards the numbers were 3, 10, 16 and 3. In the first decade of the century the average number of convictions was 23 per year. During the last ten years the average number has been 20, being about 70 per cent. of the total number of cases instituted. The percentage of convictions would be higher but for the large number of men arrested on suspicion during the war years, who were not properly bad livelihood cases. The years 1914, 1915 and 1916 shew the high figures 40, 38 and 35. It is explained that, on account of the unusually large number of ridiculous rumours which were so readily believed by the Burmans at the outbreak of war, an increase of crime was anticipated and action was immediately taken under the preventive sections to check it. The good effect on the peace of the district was very

marked. The sections have been found invaluable in dealing with men who are organisers rather than active criminals. It is the class of men against whom the cases are instituted that is of importance. The District Superintendent of Police in 1913 remarks: "A considerable number of ruffians residing in the neighbourhood of Nyaungbingyidaw on the Shwebo-Sagaing border have been disposed of, and the greater tranquility enjoyed in the Wetlet, Sheinmaga and Ywatha Police-station jurisdictions would shew that the right men have been dealt with."

The Habitual Offenders Restriction Act is now applied more frequently than the preventive sections of the Criminal Procedure Code and has been found particularly effective in stopping house-breaking in Shwebo town.

cise and ium es.

There is no excise staff in the district. The investigation and detection of smuggling and hawking opium and of illicit distillation is done by the police and village headmen. There is no sign of opium becoming popular in the district. Excise cases not being regarded as very heinous are to a great extent connived at by the headmen.

ambling t.

There is much gambling in the district especially in the Kin-u and Shwebo subdivisions. The District Superintendent of Police remarks in 1920, the year in which the largest number of convictions, 1,116, was recorded:—"It will be seen that fairly strong measures have been taken, and yet gambling is very prevalent. More action will have to be taken under section 17, and it is in this respect that I look to *thugyis* for assistance."

ebellion.

Since the annexation the people of Shwebo have endeavoured to maintain their reputation as king-makers by more than one so-called rebellion, but these have all been very unimportant affairs and serve chiefly to illustrate the extraordinary credulity and superstition of the villagers concerned. A blacksmith of Linbyu in Ye-u township, who had a wide reputation as a *Hmaw-saya* in this and neighbouring districts and who lived largely on the profits accruing from the practice of necromancy, has been implicated in each.

Early in 1904 this rascal established himself at Sagôn village near the Myinkwadaung hill north of Myedu and gave out that he was Namani Sithu, king of Burma in the 12th century, and the celebrated blacksmith Maung Tin Dè, and that the wives of the headmen and another villager were his two sisters Dwe Hla and Dwe Byu, a rather muddled yarn. He then took up the story of an old nun who had been seeing visions and had before announced that she was going to give birth to a *Minlaung* (embryo prince).

or a *Payalaung* and gave out that the child would be born on the top of the Myinkwadaung. He said that, as Namani Sithu, he would take the child to his house and act as regent till he became of age. He would dig up the Royal Barge that has been lost at Aungswa. (The people of Aungswa still say that this golden boat is occasionally seen in the river, and that various people have attempted to drag it out but for various reasons have been unable to do so.) He would perform numerous other marvels. The child would remain on the hill for a short time for true believers to pay homage, and, when all was ready, water would come from the north, the south, the east and the west, and they would descend the hill on a royal raft and float down the old Mu canal. At Yegyi *sakan*, Nyaunglebin, they would bathe, and after bathing, the child would at once become 15 years old. They would return and settle in the Myedu jurisdiction and then rule the country. The Thagyamin would build them a palace.

A large number of people believed all this nonsense, but several villagers of Sagôn, principally the Mohamedans, warned him to be careful, instancing the fate of the Wuntho rebels in 1891. Tet Kywè answered that he was Namani Sithu, and, if he was fired upon, he would turn the bullets into mud pellets, and if he, on the other hand, threw stones, they would become bullets. "I have only to hold up my hand to turn anyone before me into water, and if I stamp on the ground all will disappear." Accompanied by the headman, a *pôngyi* and the nun he then repaired to the Myinkwadaung where three *zayats* were built and preparations made for the birth. The day on which the birth was to take place passed, and crowds *still* continued to visit him. This was the state of affairs when the District Superintendent of Police, Mr. Sherman, heard of what was taking place, went to the hill, arrested Tet Kywè and the headman, and put a stop to further pranks. Tet Kywè was put on security under section 108 of the Criminal Procedure Code.

In 1906 Tet Kywè was again put on security for trying to materialize another *Minlaung*. He collected money and started repairing a pagoda in Linbyu and gave out that when it was finished a prince would come and worship it and would rule the country.

In April 1907 the affairs known as the "Sèdaw rebellion" took place. To quote the words of the District Superintendent of Police, "a young man, dressed in a red and green silk *putso* riding on an iron grey mare, rode into the police compound at Sèdaw outpost at the head of

forty men, armed with crossbows, spears and *dahs*, and called out that he was Minlaung Buddhayaza and ordered the head constable . . . . . to do homage to him on his knees and surrender his dah and join his following." The police post retired some thirty miles and warning telegrams were freely exchanged between administrative officers, but the *Minlaung* ventured no further. He absconded, and most of his followers were captured without any difficulty. They were found to be local men from the Hnaw tract. The pretender's name was Nga Myin of Poungmyo village in the Yaw tract of the Pakôkku district. Tet Kywè was again implicated and was deported under section 13 of the Village Act.

Maung Than's rebellion at Myinmu in the Sagaing district occurred in 1910. Tet Kywè was said to have given him the lucky, or rather unlucky, date. Earlier in the year Maung Than had contemplated entering Shwebo. He actually marched towards, and got near to, the town with a following armed with *dahs*, but "as they failed to get hold of the *nat* pony promised" they did not attack. The villagers between Wetlet and Shwebo east of the railway were on the verge of acknowledging him. Directly the rebellion broke out at Myinmu the District Superintendent of Police ordered out men from the Sheinmaga, Wetlet and Ywatha police-stations to arrest absconders from Maung Than's gang, and on hearing that he was on his way to Shwebangôn rode out to that village with 26 Military Police and thereby probably prevented any of the villagers in this district actively supporting him. Punitive police were quartered on Shwebangôn village for a period in consequence of the complicity of its inhabitants.

The last affair occurred in 1922 when *Wunthanu*, or nationalist associations had been organized throughout the district, and Tet Kywè had made himself head of a group of some eleven societies round Zeyawaddy and Linbyu in the west of the Ye-u township. From April 1922 Tet Kywè was engaged in a campaign to enlarge his already considerable reputation as a magician, and convince the people that he was a *Minlaung* and that a rebellion would take place in February 1923. This was not difficult. He expounded his supernatural powers at numerous meetings. He professed to be able to convert *pauk-pauk*, or parched rice, into armed men, and, with a *pyi* of cooked rice, feed a hundred of them. "Burma's day has come," he said, "wait until Tabodwè. *Ni-ga-ma-thaung* (a play on the words *Naung-ga-hma-thi* "later you will know"); in Tabodwè I will light enchanted candles and I shall be

transfigured as the Setkya Min, King of the universe. Fight for my cause and turn not back. Burma's day has come. *Myanma-kit-paw-byi.*" As his chief minister (*Amatchôk*) he chose Maung Aung Myat, and his other ministers (*amats*) Maung Po Than, Maung Kyaw Zeya, Maung Pyaung Kaing and Maung Tin. All five were officers of the Linbyu and Aunggèzin Nationalist societies, and at a meeting he expounded the latent meaning of their names, Aung Myat meant " high success," Po Than " separate," to separate the heretics. Kyaw Zeya meant "bound to succeed," a name similar to Aung Zeya, the hero of Shwebo, who defeated the Talaings. Pyaung Kaing meaning "change" and "confirm" signified the overthrow of the heretic government and the establishment of the new order of things, and Tin meant " to settle down" or "save" the Burmans. The four ministers were elected at a meeting held at Min-tè-kyaung, which Tet Kywè said he had chosen as Namani-Sithu Min (King of Burma in the twelfth century) had sojourned (*tè*) there, and the presiding *Pôngyi* of the *kyaung* was U Maga, meaning Thagya, King of the Celestials. Maung Aung Myat was elected chief minister at Aung-gè-zin, in the Aung-gè-zin-*pôngyi-kyaung*, the three *Aungs* or "successes" ensuring good fortune (the number three also being lucky). Numerous other meetings were held, and Aung Myat fed the villagers with fried cakes, *mon-si-gyaw*, *gyaw* also meaning "famous." The superstitious and credulous villagers believed it all. During August and September Tet Kywè toured among the wild and sparsely populated tracts on the Upper Chindwin border. He preached his supernatural powers and his coming transfiguration in Tabodwè (February 1923) and distributed magic medicine, on consumption of which a man would become proof against all weapons and invisible. Only those, he said, who had eaten his medicine would be able to follow him after he had become Setkya-Min. It may be noted that he retailed his foul smelling medicine at Rs. 2 a tin. Finally on October 13th, a procession was held at the annual festival at the Chaung-u pagoda in Aunggèzin village-tract in which the figure of a Burman with a crown on its head (which the prosecution later held to be a King and the defence a Buddha) was carried. Maung Aung Myat headed the procession wearing a long Burmese coat called a *Taing-ma-thein* (the Burmese Court dress now normally worn at Durbars) and attended by the ministers. The Township and Subdivisional Officers were already aware of what was going on and had informed the Deputy Commissioner, and before anything further occurred, Tet Kywē and his five ministers were arrested. They were

tried before the District Magistrate and were found guilty of conspiring to wage war against the King, Tet Kywè being sentenced to six years' rigorous imprisonment, Aung Myat, five years, and the other four, four years each.

minal
stice.

The District Magistrate has until 1922 been relieved of much of his work by a Senior Magistrate who before 1914 divided his time between Shwebo and Sagaing. Of recent years the Senior Magistrate has taken the greater number of special power cases, in 1921 trying 78 out of a total of 81 cases. There is now no Special Power Magistrate, and apart from the executive officers, the only stipendiary magistrate at headquarters is the Headquarters Magistrate who is also Treasury Officer, Joint Registrar and Additional Judge of the Township Court of Shwebo.

At the end of 1922 there were 17 stipendiary magistrates in the district, 9 with first class powers, 5 with second class powers and 3 with third class powers. Before the abolition of the Ye-u district there had been 11 stipendiary magistrates in Shwebo and 8 in Ye-u. After the amalgamation the number fell, and was 15 in 1899. Between 1894 and 1921 there was a Cantonment Magistrate who tried about a score of cases a year.

The total number of cases for disposal, which was about 800 in Shwebo and 400 in Ye-u before the districts were amalgamated, now averages about 2,000, no great change being discernible in recent years. (See Volume B.) The total number of persons tried yearly has risen from 116 and 34 in Shwebo and Ye-u districts in 1890, and 899 and 424 in 1894, to an average of four or five thousand in recent years. Of the average 2,000 or more cases for disposal about 1,200 or 60 per cent are under the Indian Penal Code. Of these again about one third are under Chapter XVI, Offences against the Human Body, and half under Chapter XVII, Offences against Property. There is little violent crime. Simple hurt cases averaged 240 in the last four years, grievous hurt 45, criminal force and assault 52. Twenty-five per cent of the offences against property are under simple theft. It is noticeable that of the persons accused of offences affecting life something like 30 per cent are under 20 years of age and 40 per cent between 20 and 30. The majority of the cases under Special and Local Laws fall under the Gambling Act, Excise Act (both of which have shown a decrease in the last twenty years) and the Village Act (which shows an increase). Cases under the Forest Act have shown a marked increase, due to the activity of the Forest Department officials. The percentage of convictions was always low in comparison with other districts. It has averaged 52 per cent in recent years.

Honorary Magistrate.

The first Honorary Magistrate was appointed in 1897. During the five years before 1917 the Shwebo Bench of Honorary Magistrates tried from 73 to 238 cases per year. In that year two new benches at Ye-u and Kanbalu were established, but the total number of cases tried decreased owing chiefly to composition of cases by the Shwebo Municipality and numerous petty cases being tried by officers under training. There are now three benches with second class powers at Shwebo, Ye-u and Kanbalu and one third class Honorary Magistrate at Tamadaw.

Civil Justice.

The Deputy Commissioner is no longer *ex-officio* District Judge. Since 18th December 1922 he has been relieved of his judicial duties on the civil side by a District and Sessions Judge for Shwebo, Lower Chindwin and Katha districts. The Subdivisional Officers have no civil judicial functions. The three subdivisional courts have, since 1st July 1920, been amalgamated under a Subdivisional Judge, who is also Additional District Judge, sitting at Shwebo. The separation of executive and judicial functions has not yet been extended to townships where all Township Officers are *ex-officio* Judges of their Township Courts. There is an Additional Township Judge at Wetlet. The Township Judge, Shwebo, has Small Cause Courts jurisdiction up to Rs. 50 in Shwebo Municipality. The Treasury Officer and Headquarters Magistrate is *ex-officio* Additional Township Judge for Shwebo.

Civil Regular suits in Subdivisional Courts.

Year.	Shwebo.	Kanbalu.	Ye-u.
Average for 1917-18-19	25	8	6
Sitting at Shwebo. 1920 ..	50	12	5
Sitting at Shwebo. 1921 ..	75	11	6
Sitting at Shwebo. 1922 ...	51	14	4

Civil Regular suits in Township Courts.

Year.	Shwebo.	Wetlet.	Kin-u.	Kanbalu.	Kyunhla.	Ye-u.	Tabayin.	Tazè.	A.T.J., Shwebo.
1919	327	259	130	290	63	170	103	51	156
1920	324	343	239	268	58	155	144	109	143
1921	354	335	204	316	40	208	162	78	202
1922	236	428	235	386	54	298	151	78	162

The total number of Civil Regular suits which averaged about 1,600 before the war was greatly reduced during 1917-18-19 by decline in the paddy trade and general financial stringency. The number has since risen to 1,995 in 1922, the total value of suits in that year being Rs. 3,71,947.

The majority of the 108 headmen with special civil powers do not exercise them at all. The few cases that are tried, 190 in 1921 and 73 in 1922, are taken by a small percentage.

Accommodation for the Civil Courts in Shwebo has been cramped for many years. The new District and Sessions Court now being built opposite the Deputy Commissioner's Court on the site of the old Public Works Department office will improve matters.

Jail.

In 1888 a lock-up to hold 50 prisoners was erected. The following year it was converted into a District Jail, and the walls of the present jail and the necessary buildings inside were completed in 1891-92 at a cost of Rs. 68,056. The jail stands on the site of Alaungpaya's Palace. A large tamarind tree in the centre of the compound is pointed out as one of the landmarks, and the tank near the warders' lines is said to have been the Royal Bathing Tank. The jail has accommodation in two dormitories for 231 prisoners. There is accommodation also in the undertrial ward for 15, the female ward 5, the cells 15, and the jail hospital 13. Only once during the last ten years has the population exceeded the accommodation and then only for a few days.

The average jail population for the last ten years has been :—male convicts, 99, 208, 223, 204, 201, 144, 145, 138, 153, 209, female convicts about 1, undertrials about 20, and civil prisoners 1 or 2. The Civil Surgeon of the district is in charge of the jail as Superintendent, with a subordinate staff of 3 jailors and 19 warders. There is a jail hospital with beds for 13 attended by a Sub-Assistant Surgeon from the Civil Hospital. The health of the jail has been good. There have been no epidemics and there have only been six deaths during the last ten years. No serious disturbances of any kind are on record. There have been three escapes, one in 1898 and two in 1903. Blacksmith's work, carpentry, wheat-grinding, paddy-grinding, and cane-work are the principal occupations of the prisoners. Minor occupations, among others, are skin-curing, aloe pounding and gardening. The garden lies outside the walls on three sides and has an area of 8·61 acres of which only 5·25 acres are under cultivation. Vegetables are grown for sale in the bazaar as well as for consumption in the jail. An average profit of Rs. 966, or

more than one-quarter of the total earnings of the prisoners, is derived from this source. The average total earnings per prisoner during the last ten years are estimated at Rs. 18, bringing the average net cost per head down to Rs. 71.

The Deputy Commissioner is *ex-officio* Registrar, but is assisted by the Headquarters Magistrate as Joint Registrar. There are Registration Offices also at Kanbalu and Ye-u, where the Subdivisional and Township Officers are Joint Sub-Registrars, and at Kyunhla, where the Township Officer is Sub-Registrar. For a few years up to 1919 on an average 900 documents concerning immovable property valued at about three lakhs of rupees were registered yearly, the largest number being in 1916, when owing to numerous land transactions with Co-operative Credit Societies in the Ye-u canal tract, 1,448 documents were registered valued Rs. 4,68,059. In 1920, 1,450 documents valued Rs. 10,06,252 and in 1921, 1,737 documents valued Rs. 10,61,004 were registered. The large increase both in number and value of documents registered in recent years is due to mortgages of mills involving large sums, purchase of land by the agents of Sir A. K. A. S. Jamal, the rise in value of land, the operations of Co-operative Societies and extension of irrigation. The number of documents relating to movable property registered annually before 1919 averaged 45 with a value of about Rs. 9,000. Figures for the last three years have been :— **Registration.**

Year.	Number of documents.	Value.
		Rs.
1919	44	26,542
1920	55	40,585
1921	65	28,548

The large increase in value in 1920 is partly accounted for by one transaction relating to goods valued at Rs. 9,000.

CHAPTER X.

REVENUE ADMINISTRATION.

As elsewhere in Upper Burma, there was prior to King Mindôn's reign no organized system of revenue collection. Under his predecessors the lower provinces paid revenue **Revenue administration in Burmese times.**

which the king appropriated in its entirety. The officials who collected it received no pay and supported themselves on the fees which they demanded from suitors. The higher officials were made *Myosas*, and the king divided the revenue of the *myo* with the *Myosas*. Upper Burma was generally exempt from direct taxation. A considerable portion of the land in this district was however held on service tenure. The occupiers paid no revenue, but were liable for service in a corps of *ahmudans*. The members of the corps not on service at the capital paid *nauktauk* for the support of those actually serving. The *nauktauk*, though in theory a voluntary contribution, was in practice collected by the local officials as though it were a regular tax. Persons who were not connected with any of the corps of *ahmudans* paid as revenue a tithe of the produce of the land they cultivated. This tax was known as the *kunmagye-ta-sè*. There was also a tax known as *kunbodaw* or *ngwedaw* levied on the general population.

During Mindôn Min's reign systematic taxation was first instituted, the reason assigned being the numerous petitions from the people that the extortions of the local officials were becoming unbearable. In 1864 the more easily assessed *thathameda* was substituted for the *kunmagye-ta-sè* and *ngwedaw*, and salaries for officials were introduced. At first *thathameda* was demanded at the rate of one rupee per household. In the following year the demand was raised to three rupees from each house. In 1228 B.E. (1866 A.D.) after the rebellion of the Padein Prince, the rate was raised in some villages to eight rupees, in others to ten, and even, in the case of some rich villages, to twelve rupees per household. The next year ten rupees was fixed as the all-round rate.

Other sources of revenue were the royal share of one quarter of the outturn from royal lands, royal gardens, irrigation, monopolies, fairs and forest taxes.

The mode of collection of the *thathameda* tax introduced by Mindôn Min was as follows :—The king's order for collection was conveyed to the *Windawhmu*. He in turn issued orders to all the *myowuns* and to the *myintat bo*, who passed on the instructions to the *myothugyis* and *thugyis*. These then submitted the *thathameda* rolls, which technically were checked by the *myingaungs* and the *myowuns* and then submitted to the *Windawhmu*, who passed them. Then *thamadis* were appointed, and assessment by them and collection by the *myothugyis* and *thugyis* began.

Objections to the *thamadis'* assessment were heard and determined by the *myothugyi* or *thugyi*, from whose decision appeal lay to the *myingaung* or *myowun*. If the *thamadis* took the oath and stated that the assessment was fair, it was never interfered with. The money when collected was paid over to the *myingaungs* and *myowuns*, who forwarded it to the *kayaing-wun.* It was generally this officer who deducted and paid the commission and the amount due for the salaries of the different officers including himself, and forwarded the balance to the *Akundaw* officer at Mandalay where it was paid in after being passed by the Taingda *Mingyi.*

Royal la and irrigation ta

The revenue from royal lands was collected by an officer called *lè-daw-ôk*, appointed by the *Hlut-daw.* He was subordinate to the *kayaing wun* and *myowuns* and took his orders from them. The title was changed to that of *lè-sa-ye* when the king demanded irrigation tax. The *lè-daw-ôk,* the *thugyi*, and the *ywalugyis* estimated the probable outturn and submitted the statement to the *wuns*, who checked it. The statement thus passed was forwarded by the *kayaing-wun* to the *lè-yôn* in Mandalay, and this department conveyed the orders of the king as to the disposal of the revenue. Sometimes the revenue was sent up in coin and sometimes in kind ; occasionally orders were received to give the paddy collected to the *pôngyis.* The same course was adopted with regard to the irrigation tax by the *lè-saye*, the only difference being the submission in the first instance by the *thugyis* of the statement of lands irrigated. This was checked by the *lè-sa-ye.* The tax was collected by the *thugyi* and paid to the *lè-sa-ye.* The *kayaing-wun* then proceeded in the manner shown for revenue of royal lands.

Fisheries, ferries, for tax, and monopolie

The principal fisheries and ferries of the Shwebo district are on the Irrawaddy river and in the Kyaukmyaung circle. This circle was independent of the *myin-mye*, the jurisdiction of the *kayaing-wun*, and dealt directly in civil, criminal, and fiscal matters with the court in Mandalay. The revenue derived from these sources was known during Burmese rule as the *a-sut* and *a-kauk* tax The last named consisted chiefly of cart tax, boat tax, and commission agency tax.

The *myothugyi* of Kyaukmyaung invariably had the monopoly of these four taxes from the revenue office in Mandalay, and paid for them a fixed sum of Rs. 2,400, rendered in half-yearly instalments. He in turn sublet them to others. The tax realized by the *myothugyi* was a fluctuating one, dependent upon the state of the river and the

rainfall. The forest tax was fixed at the rate of one rupee per *dah*. Cart tax was fixed at two annas for every cart used for purposes of trade. The boat tax varied from one rupee to four annas per boat, according to the articles traded in. There were four commission agencies, one at each of the following places:—Kyaukmyaung, Yedaw, Malè, and Shagwe. These four sources of revenue were of no great importance, yielding comparatively small amounts.

The fisheries on the Irrawaddy were until Mindôn Min's reign claimed and worked as *bobabaing* or private property, belonging to the families of the original fishermen. King Mindôn, however, issued a rescript claiming the fisheries for the crown, and from that date they became royal property.

yal rdens. The royal gardens never paid taxes to the revenue office in Mandalay. The gardens were generally assigned to favourite Queens and Princesses for their use for life. The gardeners were all appointed by the king and were invested with the powers of a *thugyi*. They looked after the garden as well as the village, when one was attached to the garden, and periodically presented the royal lady to whom it was granted with a portion of the produce. The office of the gardener was hereditary. There were nine gardens in the Shwebo district.

Thathameda. As far as it is possible to ascertain the actual figures in the absence of proper statistical returns, the *thathameda* collections in 1869 and 1884-85 were as follows:—

Place.	Collections in 1869.	Number of houses in 1884-85.	Houses assessed.	Collections in 1884-85.
	Rs.			Rs.
Tabayin ...	76,496	13,669	11,675	70,050
Yatanatheinga (Shwebo).	1,20,728	22,861	19,411	1,16,466
Ngayanè Kawthandi.	7,720			
Tantabin ...	6,556	2,665	2,577	15,462
Pyinsala-nga-myo.	34,560			

Place.	Collections in 1869.	Number of houses in 1884-85.	Houses assessed.	Collections in 1884-85.
	Rs.			Rs.
Thabuttaw-chaukywa.	8,085	...	...	...
Kyaukmyaung	5,358	...	...	...
Thitseingyi	1,896	...	...	...
Ngabatchaung	1,312	...	...	...
Sheinmaga	4,014	...	...	...
Myedu ...	32,944	8,014	6,390	44,730
Thissi-chaukywa.	1,504	...	...	...
Shwegyinsa (Shwe-ta-sè-thôn-ywa)	6,120	...	...	...
Kyiwun wun-tha Alè-gyaung.	8,000	...	...	...
Thinkadaw	2,400	...	...	...
District Total	3,17,693	47,209	40,053	2,46,708

It is probable that jurisdictions not shown in 1884-85 were included under either Yatanatheinga *Myinnè* or other *nè* (*e.g.* Kyaukmyaung possibly under Singu). The list indicates a clear decrease in Thibaw's time, due no doubt to the lawlessness of the country. The 1891 census figures show a total of 48,225 houses. (Households are probably referred to in the third column above.) The *thathameda* demand in 1895 was Rs. 3,62,371 and between 1895 and 1905 it averaged Rs. 5,01,600.

The following accounts written on *parabaik* illustrate how Rs. 18,855 of the *thathameda* of Tabayin *wun*-ship was disposed of in 1876:—

Households examined	11,765
Household exempted under the heads *Thugyis*, *Pôngyis*, the Forty (*i.e.* The *Maha le-sè*, the relations of the King), slaves, etc.	2,417

Thenat-asu musketeers' households	...	1,388
Nauktauk households deducted	...	6,054
Remaining households ...	...	1,906
At Rs. 10 per household ...	Rs.	18,855
One half *thugyis'* 10 per cent commission	.. ,,	943
Remaining to be submitted ...	... ,,	17,912

From which deduct:— Rs.

Yatana *Ywasa*	...	1,000
Taungkwin *Ywasa* ...	...	600
Mè-o *Ywasa*	...	600
Lè-cha *Mibaya Pwèdaw* ...	...	720
Kanbo *Ywasa*	...	600
Myoyo adaw (Keeper of the walls)	...	262
Ahlu to *Yahans*	...	4,440
Myo-wun's official pay ...	...	3,530
The revenue collector's pay ...	...	50
Petty cash spent in submitting revenue	...	70
Total expenditure ...	...	11,912
Remaining to be submitted ...	...	6,000
Submitted	...	6,000

Royal lands. Amounts collected from the royal paddy fields, cultivated grounds and gardens in the year 1884:—

Place.	*Pè.*	*Kaukkyi* paddy.	*Mayin* paddy.	Total baskets of paddy.	Payments from gardens, etc.
					Rs.
Shwebo ...	1,312¾	3,500	3,500	7,000	200
Tabayin ...	10	200	...	200	...
Tantabin Pyinsala }	550	7,400	...	7,400	...

Paralaik accounts show that about 60 per cent of the royal lands in Shwebo were "eaten" by various people, the Sabènago *Minthami*, the Megawun gardener, the *Kandaing* of the Mahanada tank, *Myosas, Bos*, etc. There were royal granaries at Kabo, Halin, Kawdaw and Ywanan.

Other receipts were the Mu ferry duty Rs. 1000, and the Mu and Tôktalôk toll duty Rs. 2,500. Ferries a fairs.

Market booths at pagoda festivals were in some places leased.

Pagoda.	Place.	Date of feast.	Rent.
			Rs.
Thihadaw ...	The island in the Irrawaddy south of Thabeikkyin.	Tagu ...	380
Shwegugyi ...	Thitseingyi ...	Tawthalin	32
Shwegugale ...	Tabayin ...	Thadingyut	8
Shwemuttaw ...	Do.	Tazaungmôn.	8
Shwetawgyaung	Do.	Do.	32
Do.	Butywa ...	...	36
Do.	Mayagan ..	Tagu ...	72
Ingyindaw ...	Yatanatheinga ...	Tabaung	260
		Total ...	828

The collection of these dues had originally fallen to the *Wuns* concerned, but later the Mandalay revenue office farmed out the collections to contractors who undertook to pay a fixed sum for the license to take fees. The licensee besides paying a fixed rent to the Mandalay treasury had to bear all the expenses of the fair, such as building stalls, holding *pwès*, and feeding the officials who attended the fair. The collections from the bazaar stalls depended upon the goods offered for sale. Each trade cart had to pay eight annas.

Revenue system fro the annexation to th introductio of the original settlement (1907-08).

After the annexation, the *thathameda* tax and the rent on state land were retained. Members of the corps of *ahmudans* were no longer liable for service or payment of *nauktauk*, but they had to pay *thathameda*. *Thathameda* was assessed at the normal rate of Rs. 10 per household subject to reductions in villages which suffered from drought in any particular year. The average collections for the ten years 1895-1904 were Rs. 5,01,612 or Rs. 8·69 per household assessed. Over ninety per cent. of the total revenue was

derived from this source. State land revenue was assessed in the Ye-u subdivision at a flat rate of one rupee per *tin-gyè* (four-fifths of an acre). This rate was subsequently raised to Rs. 2 per acre owing to a misunderstanding as to the size of the *tin-gye* unit of area. In the Shwebo and Kanbalu subdivisions the assessment of state land was based on a proportion of the gross produce converted into cash at prevailing market prices. Estimates of outturn were made by headmen assisted by assessors. The fraction taken as revenue varied from a fourth to an eighth. Non-state land paid no revenue but was assessed to water rate when irrigated from a work maintained by Government. State land paid no water rate. The land revenue paid by it was held to include the charge for water. For the ten years 1895-96 to 1904-05 the average annual collections of state land revenue amounted to Rs. 16,927 and water rate to Rs. 39,111.

ginal ement of rigated ion of district 00-06):

The portion of the district lying outside the area irrigated by the Shwebo Canal was settled between 1900 and 1906 by Mr. W. F. Grahame. The area for settlement was divided into 29 assessment tracts, and separate main kinds were formed for irrigated paddy land, unirrigated paddy land, spring rice land, *ya* land, *kaing* land and garden land. Main kinds were further divided into soil classes. No differentiation was made in the assessment of state and non-state land. The assessment was an assessment at acre rates on the matured area. The rates proposed were generally soil rates, though there were special crop rates for betel vine, onions and plantains and a combination of soil rates and crop rates for crops grown on *kaing* land. The rates proposed were based on an eighth of the net produce but in certain tracts were subsequently raised by the Settlement Conference to a sixth of the net produce. Toddy palms were assessed according to what was then a new procedure. A lump sum demand based on a count of the trees tapped was assessed on each village-tract. As all income from land was now assessed to land revenue, the old *thathameda* tax in theory became a tax on income from non-agricultural sources, and the previous uniform rate of ten rupees per household was reduced. The rates proposed and accepted varied generally by land revenue assessment tracts. These rates were Rs. 3, Rs. 4, Rs. 5, and Rs. 6 per household, the lowest rate being applied to the centre of the Ye-u subdivision and the highest to villages along the Irrawaddy where the bulk of the earnings were non-agricultural. In addition a few towns and villages, the population of which was mainly non-agricultural, were assessed at special

rates varying from Rs. 6 to Rs. 10. In the result the revenue from all sources was estimated at Rs. 7,25,087, an increase of Rs. 1,24,936 or twenty per cent, on the revenue in the settlement year, Rs. 6,00,151. Owing, however, to the settlement estimate being based on the cropped area instead of the matured area it was not expected that the settlement would produce more revenue than had been obtained under the old system. The event has shown that this view was correct. Such increase in revenue as there had been in the unirrigated portion of this district would have been obtained under the old *thathameda* system owing to the increase in population that has taken place. When allowance is made for the cost of the original survey and of the Land Records establishment, the state has probably suffered a loss, but the incidence of the assessment has been much more equitable than under the old system by which a flat rate of ten rupees a household was applied to all villages.

Settleme of the S bo Can area (19 10).

On the opening of the Shwebo canal in 1906-07 *interim* rates with initial remissions were applied in place of the former uniform *thathameda* rate of ten rupees and revenue from state land. Water rate was assessed at a flat rate of Rs. 4-8 per acre for irrigated winter rice and Rs. 3 per acre for irrigated spring rice. The land revenue acre rates were state (wet) Rs. 1-6, state (dry) 14 annas, and non-state (wet) Rs. 1, non-state (dry) ten annas. *Thathameda* was reduced from ten rupees to three rupees in all except two villages.

The area was brought under regular settlement by Mr. C. H. Duffin between 1908 and 1910. The canal area was divided into six tracts, of which three were irrigated and three unirrigated. In respect of the main crop, irrigated winter rice, tract differences were not reflected in the rates proposed. In the case of unirrigated paddy land and *ya* land somewhat higher rates were applied to the two tracts adjacent to the Mu river than to the rest of the area. Irrigated winter rice land was divided into four soil classes and the rates finally adopted were based on 22½ per cent of the gross produce for water rate and one-sixth of the not produce for land revenue, water rate being included in the cost of cultivation in calculating the net produce. The actual rates were:—1st class Rs. 8 (water rate Rs. 5·875, land revenue Rs. 2·125), 2nd class Rs. 5·75 (water rate Rs. 4·375, land revenue Rs. 1·375), 3rd class Rs. 3·375 (water rate Rs. 2·875, land revenue Rs. 50), 4th class Rs. 1·50 (water rate Rs. 1·25 and land revenue Rs. 25). The result of the settlement was more equitable distribution of the demand. The *interim* flat rates had pressed very severely on land that was poorly irrigated. The total from all sources, however, was left practically unaltered at Rs. 7,66,193. The

water rate demand was reduced by five per cent. On the other hand land revenue was raised by 29 per cent while *thathameda* owing to the adoption of a two rupees rate for most villages fell by 25 per cent.

assification of Shwebo Canal area, 1916-17.

The original settlement of the Shwebo Canal area was carried out before all distributaries and watercourses had been completed. The completion of these works, which altered conditions of water-supply, coupled with extensions of cultivation, soon rendered reclassification necessary. In 1916-17 Mr. R. B. Smart carried out the work with a small party. The result of the operations was to raise 65,626 acres and reduce 14,826 acres in classification. The Settlement Officer reported that he found "unceasing complaints made from end to end of the Canal Tract as to the excessiveness of the rate of Rs. 8 on first class land, and recommended that the rate be reduced to Rs. 7. The rate on first class irrigated winter rice land was reduced by Government from Rs. 8 to Rs. 7-4, and it was also decided that until the expiry of the settlement land raised by more than one class should be assessed at the rate of the class next above the original class in which it stood before reclassification. These concessions reduced the effect of reclassification to an increase in revenue of nine per cent on the basis of the assessment of the year 1915-16.

Ye-u Canal area.

Irrigation from the Ye-u Canal began in the year 1918-19. No alteration was made in the land revenue rates in this area. The rates sanctioned as a result of Mr. Grahame's settlement continued to be applied. An *interim* water rate was assessed at a low flat rate of Rs. 2 per acre on all irrigated land except in Mu side tract where the rate was Rs. 2-8. The usual initial exemptions were allowed.

Revision settlement of whole district, 1912-23.

The revision of the settlement of the whole district at one operation was undertaken by Mr. B. W. Perkins, with No. 5 Settlement Party in November 1918. He was succeeded by Mr. A. Williamson in January 1920. The financial effect of the rates proposed at revision settlement is to raise the demand from all sources including land revenue, consolidated water rate and land revenue, tree revenue, and *thathameda* to Rs. 20,95,140, an increase of Rs. 2,36,779 or 12·74 per cent. on the demand of the expiring settlement. The increase proposed in consolidated land revenue on land irrigated by the Ye-u Canal is fifty-one per cent and on land irrigated by the Shwebo Canal seven per cent. On unirrigated land the enhancement proposed is fourteen per cent. The total *thathameda* demand remains practically unaltered. Orders on the revision settlement proposals have not yet been passed by Government.

Between 1907-08 the date of the introduction of Mr. Grahame's settlement and 1921-22 collections of land revenue proper have averaged Rs. 4,47,356. This sum, it should be noted, does not include water rate collections nor share of land revenue credited to irrigation. The average water rate collections in the Shwebo Canal area have been Rs. 6,37,304 and share of land revenue Rs. 1,37,814. In the Ye-u Canal area water rate collections have averaged Rs. 1,07,846 since the canal was opened in 1918-19. In the case of minor works the average share of land revenue credited to irrigation has been Rs. 13,023. The largest amount of land revenue proper collected was Rs. 5,25,341 in the favourable season 1913-14. The lowest amount collected was Rs. 2,56,671 in 1907-08, or less than half the amount collected in 1913-14. In 1907-08 irrigation from major works was only in its second year, and the full effects of an unfavourable season were still felt. In subsequent years, as irrigation expanded, the range of difference from year to year in land revenue collections narrowed, and in 1920-21, a season even more unfavourable than 1907-08, land revenue collections were only 20 per cent less than in 1913-14, the year of maximum revenue. Though irrigation has had a stabilising influence on the land revenue of the district as a whole, fluctuations in land revenue in the unirrigated portion of the district are still extremely violent. In most tracts the revenue demand in the year of maximum assessment since original settlement was more than double that of the year of minimum assessment, while tracts like that enjoying precarious irrigation from the Muhaung Canal where the revenue fluctuated between Rs. 32,856 and Rs. 2,178 are by no means uncommon. In unirrigated tracts fluctuations in revenue are due almost entirely to the character of the season. In canal irrigated areas they are within much narrower limits and are due as much to the rise and fall of prices as to the character of the season and the supply of water available for irrigation. Fluctuati[ons] in land revenue.

Owing to the assessment of matured areas only in unirrigated tracts land revenue remissions are ordinarily small. The average annual remissions since 1907-08 have been Rs. 3,311. This sum does not however include remissions on the water rate portion of the demand. Remissions in canal areas have shown a tendency to increase in recent years partly owing to unfavourable seasons but mainly because cultivators have become more acquainted with the remission rules.

The average annual *thathameda* collections between 1907-08, the year in which land revenue was introduced, Fluctuat[ions] in *thath[a]meda.*

and 1921-22 have been Rs. 3,08,273 or Re. ·84 per head of population. The number of assessees has increased steadily from year to year with one setback in the period 1917-19. In 1917-18 the number of assessees fell from 87,714 to 86,544 and in the following year to 84,935. In the first year the decrease was due to the exemption of guardians of recruits from assessment. Possibly also the absorption of revenue officers in recruiting work led to some slackening of revenue administration. In the second year the influenza epidemic together with exemption granted to the relatives of men still serving in the army led to a still larger fall in the number of assessees. From 1919-20 onwards the number of assessees has increased at the rate of about a thousand annually. Remissions have generally ranged between three thousand and four thousand rupees and have been due to erroneous assessment and migration of assessees. Only in two years has it been necessary to grant remission owing to widespread economic distress. In 1920-21 remission to the extent of half the notified rate was granted to all villages in the unirrigated portion of the Shwebo subdivision, and in the following year when the season was only a little less disastrous 84 village-tracts received remission. The total amount remitted in these two years was Rs. 42,146 and Rs. 35,363 respectively.

.nd venue ablishnt.

The revenue department of the Deputy Commissioner's office is supervised by an *Akunwun*, who is ordinarily a member of the Subordinate Civil Service. The Land Records staff which is concerned with the assessment of land revenue and the maintenance of the record of rights is supervised by a Superintendent of Land Records under the control of the Deputy Commissioner.

A topographical survey of the district was begun in 1889-90 and completed in 1892-93. In 1892 a cadastral survey on the sixteen-inch scale was begun under Mr. Gibson. It was continued from 1892-93 to 1895-96 by No. 3 Party, Survey of India. Subsequently in 1902-03 an area of 519 square miles that had been demarcated in the previous year was mapped by No. 7 Party, Survey of India. In 1894 a Subordinate Land Records staff of 1 Inspector, 6 Surveyors, and 14 Chainmen in Shwebo, and 1 Inspector, 4 Surveyors and 10 Chainmen in Ye-u was appointed. This staff was employed on the assessment of water rate on land irrigated by Government works and of state land revenue on cultivated state land. A new Land Records establishment was introduced in 1899-1900 and Mr. C. G. S. Wood was placed in charge as Superintendent. It consisted of 6 Inspectors and 48 Surveyors. This

staff worked in co-operation with the Settlement Party during the original settlement operations. In 1903 the staff was raised in strength to 10 Inspectors and 100 Surveyors, and its control was transferred from the Deputy Commissioner to the Settlement Officer. In 1907-08 on the conclusion of settlement operations the assessment to land revenue of the whole district was undertaken by this staff. Subsequently owing to the extension of cultivation in canal areas the staff has been further strengthened and now consists of 1 Superintendent, 2 Assistant Superintendents, 12 Inspectors and 122 Revenue Surveyors. The Land Records charge of the district is by far the heaviest in the Province, the number of surveyor's charges being more than double that of the average district. Under the new scale of pay recently sanctioned the cost of supplementary survey in 1922-23 was Rs. 1,26,381 or 8·51 per cent. of the total assessment in that year. This appears on the face of it a reasonable percentage for an Upper Burma district, but the percentage cost for the district as a whole is reduced by the high rates of assessment in canal areas. In the unirrigated portion of the district, the cost of the assessing staff amounts to more than twenty per cent. of the assessment which is far too high a price to pay for any system of assessment however perfect.

Fisheries. Fishery revenue is not very important. The average revenue for the three years 1921-22 to 1923-24 has been Rs. 13,880. Of this less than a thousand rupees has been derived from net licenses. The chief source of fishery revenue is the sale of leased fisheries, of which the most important are the Makauk and Kalamadaunggyi fisheries on the Irrawaddy and the Kadu, Halin and Thamantha lakes in Wetlet township The Irrigation Department also auctions the rights to fish in the canals

Miscellaneous revenue. Miscellaneous sources of revenue including fines under the Village Act, royalties and fees on minerals and Town Lands rent have produced an average revenue of Rs. 19,194 during the ten years 1911-12 to 1920-21.

Stamps. Revenue from judicial stamps, which averaged some Rs. 31,000 in the first decade of the twentieth century, rose during the next three or four years to Rs. 39,114 in consequence of increased litigation in connection with occupation of land in the Shwebo canal area. The revenue was more normal in 1914 as the canal area was settling down, but with the war came a further increase occasioned by a feeling of insecurity among money-lenders which induced them to call in loans and resort more freely to the civil courts. The years 1916 to 1919 were years of financial stringency, and stamp revenue fell to Rs. 26,584. Since

then the recovery of the money market and litigation in connection with the occupation of land in the area newly irrigated by the Ye-u canal have brought the revenue up to Rs. 49,098 in 1922.

Revenue from non-judicial stamps which similarly rose from Rs. 12,139 in 1910 to Rs. 21,010 in 1913, owing to land transactions in the Shwebo canal area, from that date declined as the canal area settled down, and, apart from a sudden rise in 1917 brought about probably by an increase of transactions securing loans or improving security, continued to decline with the general tightening of the money market to Rs. 12,094 in 1919. The increase in land values and the consequent redemptions and re-mortgages brought the revenue up to Rs. 20,366 in 1920 and Rs. 27,035 in 1922. In 1921 the extensive purchases of land by Sir Abdul Jamal was responsible for a rise to Rs. 30,314.

There are one hundred licensed vendors of stamps and one *ex-officio* stamp vendor. There are no salaried vendors. As the remuneration is small, headmen do not take much interest in the sale of stamps, and, at the same time, the people prefer to purchase their stamps in the towns where they are able to get their documents drafted, and where they have to get them registered. Discount paid to vendors in 1922 was Rs. 389 for judicial stamps and Rs. 1,090 for non-judicial stamps.

Statistics of stamp revenue shown in Volume B for the years 1901 to 1911 refer to judicial stamps only. For the years 1911 to 1921 the combined revenue from judicial and non-judicial stamps is shown.

Excise. There is no excise staff in the district. The *Akunwun* is a special Excise Officer under Direction 3 of the Excise Manual and has had, since March 1921, the assistance of an excise peon. The investigation and detection of smuggling opium-hawking and illicit distillation is done by the police and village headmen.

There is no opium shop in the district. Consumers obtain their supplies at Katha or Mandalay. Thirteen special licenses were issued in 1922. These include one issued to the Manager, Bombay Burma Trading Corporation, for the treatment of sick elephants, one to a doctor for medical purposes only, and the remaining eleven to consumers residing at a distance from the shops. Small quantities of opium are at times smuggled into the district by carriers, but the demand is not great and the results not lucrative. There are a few Burman opium consumers or *beinponsas* in Shwebo town and around Wetlet. The retail price of illicit opium ranges from Rs. 5 to Rs. 6 a tola.

The main sources of excise revenue are license fees for the sale of *tari*, foreign liquor, and beer. The last item has fallen during the last five years from over Rs. 1,300 to Rs. 90 probably owing to the rise in the price of beer. In 1920 the only shop for the sale of country fermented liquor other than *tari* was closed. A regular revenue of between Rs. 3,000 and Rs. 9,000 had previously been derived from this source. Licenses for the sale of foreign liquor generally bring in from Rs. 2,000 to Rs. 4,000. The number of *tari* shops was 9 in 1912, and the revenue obtained from the auction of their licenses Rs. 5,330. In 1914 another shop was opened, and, on the adverse comments of the District Superintendent of Police concerning the large number of shops, the Commissioner, Sagaing Division, wrote: "The complaint of the District Superintendent of Police against shops conflicts with the opinion of Father Vuilli, who made a pilgrimage to Sagaing to urge me to open a new shop, which he assured me was the only remedy for dealing with the drink question among his flock which had got beyond his control." New shops were opened, and in 1918 there were 16 shops from which a revenue of Rs. 12,501 was obtained. The following year the number was reduced to 15, in 1921 to 14, and 1922 to 13. Revenue, on the other hand, rose rapidly year by year and was in 1922 Rs. 26,946.

The thirteen shops are situated at Shwebo, Kyaukmyaung, Kin-u, Halin, Sheinmaga, Thitseingyi, Mègôn, and Wetlet, in Shwebo subdivision, Kanbalu, Tangôn, and Zigôn in Kanbalu subdivision and Ye-u and Tabayin in Ye-u subdivision.

Other than *tari* shop licenses there were issued in 1922 one license for the retail vend of foreign alcoholic liquor (F.L. 13) at Shwebo, one license for the wholesale vend of foreign spirit and beer (F.L. 6-8) at Shwebo, a Refreshment Room license (F.L. 19) at Shwebo Railway station, two licenses for the retail vend of foreign spirit manufactured in Burma (F.L. 7) at Kanbalu and Ye-u, and two licenses for the retail vend of beer manufactured in Burma (F.L. 9) at Kanbalu and Ye-u. Four licenses for the retail sale of denatured spirit (F.L. 25) were also issued in Shwebo town.

The total excise revenue was Rs. 11,782 in 1912. It rose to Rs. 31,528 in 1917 fell to Rs. 19,882 in 1918, and again rose to Rs. 30,336 in 1922. This last included Rs. 26,946 under the head of *tari* licenses, Rs. 90 under malt liquor licenses, Rs. 3,280 under licenses for the sale of foreign liquors generally, Rs. 10 under opium licenses and Rs. 10 under hemp drug licenses.

Rewards in opium and excise cases form the bulk of the excise expenditure which is ordinarily under Rs. 2,000.

Salt revenue.

Up to 1874 the King of Burma interfered in no way with the manufacture and sale of salt, except that an export duty of eight annas per hundred viss was collected at riverine stations such as Thitseingyi, Sheinmaga and Kyaukmyaung. The smaller quantity of salt which went to surrounding villages apparently paid no duty. No one had the monopoly of sale, or of purchase at the wells.

In 1874, however, Mindôn Min made an attempt to obtain for the crown a monopoly of the purchase of salt in the following way. Exemption from payment towards the support of the cavalry or other regiments in Mandalay, together with a loan of ten rupees in cash, was promised to each salt worker who would enter into an agreement to sell all his salt to the King at a fixed rate of five rupees the hundred viss, and also to pay his *thathameda* tax in salt at the same valuation. These terms were accepted in Shwebo by about two thousand workers, and the salt bought by the King under this arrangement amounted to about five hundred thousand viss in the year. It was all carried to Thitseingyi at a cost of ten annas the hundred viss and was conveyed thence by Royal steamers to Mandalay, where the King sold it at a very large profit to ordinary traders. Nevertheless, after continuing for two years, the arrangement was stopped, and the old method was resorted to, by which eight annas customs tax was paid on all salt exported. This arrangement referred only to *bobabaing* or private salt workings. Besides these there were some three hundred royal workings (*ayadaw*), and for the management of these the King employed a salaried officer on one hundred rupees a month. Including the three hundred royal wells, it is believed there were about three thousand salt-workings in Shwebo in King Mindôn's time. They fell off greatly afterwards, and in October 1889 there were only about six hundred worked of which thirty were Government wells, From this date, however, they began rapidly to increase in number, and on the 1st April 1890 there were one thousand and eight *bobabaing* wells, and fifteen royal wells, or a total of one thousand one hundred and twenty-three workings. The system then adopted was that each private well paid a tax of five rupees and each royal well twenty-four rupees (*i.e.* the value of four hundred viss of salt, the old Burmese rate).

In July 1888 the Chief Commissioner directed that in districts in which no tax had hitherto existed a tax of five rupees the pan should be imposed and in districts where a

tax had existed a tax of ten rupees the pan. In Shwebo District a tax of eighteen rupees for each salt well had existed, and this tax was allowed to remain unaltered.

Shwebo is now one of the sixteen districts where composition for salt duty by payment of a sum assessed upon the apparatus used is permitted. Elsewhere the duty is levied at a fixed rate per hundred viss. Salt boiling is restricted to 32 notified kwins, 26 in Wetlet township, 4 in Shwebo township and 2 in Kanbalu township (*see* Appendix I, Burma Salt Manual). The seventeen villages concerned are divided into three classes according to the quality of the soil, and are at present assessed at the following rates per seven gallon cauldron :—Rs. 20 in Sadwingôn and Hmetti, Rs. 30 in Halin (Ingan), Thakuttaw, Leinbin, Singut Tachantha, Wunbègôn, Samun, Nyaungbindwin, Tagundaing and Sadwingyi, Rs. 40 in the Taungbo, and Twinma, quarters of Halin and Tanaunggôn, Yetthit and Ye-bu hamlets of Halin.

Licenses are issued by Township Officers who are required to pay surprise visits to the workings and see that orders are not being infringed. No special salt establishment is employed. The revenue is collected in two instalments, the first half at the time of issuing the license and the second half in June. Security for payment of the second instalment is not taken as there is no difficulty in collection. The industry is a poor one and is insufficient as a sole means of livelihood, but the workers adhere to their hereditary occupation, and nothing less than actual loss will stop them. They work about seven months in the year beginning after harvest. The character of the seasons has a direct effect upon the output, early rains stopping work early and a good harvest the previous year reducing the necessity for work. Part of the salt is exported to Katha and Mandalay Districts for fish curing, and the remainder is consumed throughout the district. The amount used for fish curing within the district is negligible. Except for fish curing foreign salt is preferred owing to its fine grain and slightly pungent taste and between 400 and 500 tons are imported yearly. It is used chiefly along the railway line. The outturn of local salt has varied considerably. In 1910, when the composition rates were Rs. 10, Rs. 15 and Rs. 20,541 licenses were issued and the outturn was estimated at some 524 tons, about 300 tons of foreign salt being imported. The revenue was Rs. 9,260. In the succeeding years the outturn fell, especially in 1914 when the rates were raised to Rs. 15, Rs. 23 and Rs. 30, and the industry was restricted to seventeen of the 32 villages in which it had previously been

carried on. The industry also waned as irrigation offered more lucrative employment to the workers. In 1914 the output was about 324 tons, the number of licenses 265 and the revenue Rs. 6,833. From that date both licenses and output increased yearly, except in 1917 when the rates were raised to the present scale Rs. 20, Rs. 30, and Rs. 40. This increase was largely due to a more than fifty per cent. rise in prices, brought about by the restriction on imports of foreign salt owing to war conditions. In 1921 the number of licenses was 520, bringing in a revenue of Rs 16,105. The outturn was not however as high as it had been two years previously (over 900 tons), as it was reduced by the failure of the rains, the scarcity of water and the inability of the salt boilers to obtain sufficient brine. In 1921 and 1922 the price of foreign salt fell considerably throughout the province and, in Shwebo, fell below the price of locally manufactured salt. In 1922 the price of local salt also fell, but not as fast as foreign salt. This has reduced the demand for licenses to 423 in 1922 and the revenue to Rs. 14,350. The outturn in 1922 was estimated at 860 tons. These 423 licenses cover 431 cauldrons.

come-tax.

Income-tax has hitherto been assessed only on Government servants. From 1924 it will be introduced generally in the district.

CHAPTER XI.

LOCAL SELF-GOVERNMENT.

iwebo unici-lity.

The first constitution of Shwebo as a Municipality was notified on 4th February 1888, under section 3 of the Upper Burma Municipal Regulation, 1887. The boundaries then laid down were as follows:—The area enclosed within four straight lines drawn at right angles to one another and parallel to the four walls enclosing the City of Shwebo at a distance of 30 feet from the outer bank of the moat, as marked by wooden piles driven into the bank, and through pillars placed at the four corners.

The area under the newly formed Municipal Committee thus corresponded with the old walled City of Shwebo approximately 2 miles square of which a great part was, as now, land under cultivation. The boundaries were amended in 1893 to include a cemetery for Buddhists, Hindus and Mahomedans provided in that year, and again in 1906 to include the Civil Station, large areas of cultivated land on the west including the village of Mingôn being at the same time excluded.

The Municipal Committee set up in 1888 was composed Constitutio of six official members, the Deputy Commissioner, the Treasury Officer, the Civil Surgeon, the Executive Engineer, the District Superintendent of Police and the Township Officer with six non-official members nominated by the Local Government. The Committee held its first meeting on 10th March 1888, when 3 European and 5 Burmese members were present. In the same month the Subdivisional Officer, Shwebo, was added to the Committee, and the Deputy Commissioner and Subdivisional Officer were by notification appointed to be *ex-officio* President and Vice-President of the Committee. In 1893 the Township Officer, Shwebo, was appointed Vice-President in place of the Subdivisional Officer who was frequently on tour and in 1901 the Civil Surgeon was appointed. The office then became elective, but the committee continued the Civil Surgeon in office. On 10th March 1905 the Municipality was reconstituted under the Burma Municipal Act with representation and boundaries as before.

On the 1st day of August 1921 representation became entirely elective. The town was divided into eight wards, of which one returned two members, and the remainder one member each, to the Committee, while three communities, the Europeans, Hindus and Mahomedans, each returned one member. The elected committee was empowered to choose its own President and Vice-President, and to co-opt two other persons as additional members.

The electoral words are as follows:—

Pyinze North (two-member constituency), Pyinze South, Eindayat, Monadwin, Minyat, Anaukze, Thakuttaw and Wundawin.

The powers of the President (which may also be delegated to the Vice-President by order of the Committee) are briefly as follows:—The President is the executive authority in all departments, superintends the affairs of the Municipality generally, conducts its correspondence, enquires into all complaints made against Municipal officers, and otherwise exercises control over them. He has authority to appoint and dismiss all employees whose salary is less than Rs. 50 per mensem, and to grant such employees leave. Other powers vested in the President are the power to sanction expenditure for urgent special matters up to Rs. 500 provided budget provision exists, to close streets for public purposes, and to act for the committee in respect of certain sections of the Municipal Act.

The administrative staff of the Municipality consists of F the Secretary, two clerks, a durwan and a peon. The

Secretary is also overseer, and as such has the supervision of ten coolies and one *gaung* maintained for public works purposes. A conservancy inspector supervises the work of the public health staff, consisting of twenty coolies and a *gaung* for day conservancy, and sixteen sweepers and one *jemadar* for night conservancy. The Bazaar establishment of four durwans and eight coolies and sweepers, is controlled by the Committee but paid by the lessee for the time being. A caretaker and a sweeper are maintained at the slaughter-house.

Population. The population of the town including Cantonments which was 9,368 in 1891 was 9,626 in 1901, 10,629 in 1911 and 10,605 in 1921, the decrease in the last decade being partly due to reductions (about 750 from the 1901 figure) in military strength at Cantonments.

Income and expenditure. In the year of its constitution the revenue of the Municipality was Rs. 2,798 derived chiefly from the bazaar, with small contributions from the slaughter-house and leased fisheries. But in the following year the pacification of the country and the consequent expansion of trade increased the revenue sufficiently to enable the committee to lay out roads and drains and meet the cost of Municipal Police, a force of two sergeants and 10 constables. The laying out of the town was facilitated by a fire which destroyed nearly half the town in 1889.

In 1890 a house tax on persons not paying *thathameda* was imposed at the rate of 3 pies per square foot on land covered with two-storied buildings, 2 pies on land covered with one-storied buildings and Rs. 10 per acre on uncovered land. The expenditure on roads and drainage increasing, further sources of income had to be sought in 1893, and after an attempt had been made to levy a cess on *thathameda* first at 30 per cent. and then at 15 per cent., the Local Government finally, in November 1894, sanctioned such a cess at 10 per cent.

The figures of annual income and expenditure in the accounts of 1897-98, at the end of ten years' working of the Municipality, are ample evidence of the increasing prosperity of the town and the capable management of its affairs by the Committee under the guidance of the Local Government.

The chief items of income in detail exclusive of Grants and Contributions etc., were as follows :—

1. *Municipal rates and taxes*—

(*a*) Tax on houses and lands (including also cess on *thathameda*)	Rs. 2,876
(*b*) Tolls on roads	975

2. *Realizations under Special Acts*—	Rs.
(*a*) Pounds	342
(*b*) Hackney carriages	198
3. *Revenue derived from Municipal property*—	
(*a*) Bazaar stall rents	7,325
(*b*) Bazaar daily collections	2,579
(*c*) Slaughter-house fees	2,043

Leased fishing had been abolished in 1889 and the moat thrown open to rod and line fishing only. Cart tolls were first levied in 1892.

The principal items of expenditure were :—	Rs.
1. General administration	1,751
2. Police	2,813
3. Conservancy, including road clearing ...	2,490
4. Hospital and dispensary	3,542
5. Market and slaughter-house ...	3,535
6. Public works	6,085

The hospital and dispensary had been taken over in 1893 in consideration of an adequate grant from Government.

The accounts for the year show a closing balance of Rs. 3,707.

In 1900 the sale by auction of the bazaar as a whole gave an increase of Rs. 4,000 in the receipts from this source. In 1905 a tax of 5 per cent. on the annual value of all lands and buildings and compounds was substituted for the old house tax and *thathameda* cess, and in the next year an increase in revenue of Rs. 557 resulted. From this date ordinary revenue steadily increased, and in 1920-21 amounted to Rs. 69,038, Rs. 8,864 from the tax on houses and lands, Rs, 19,812 from tolls on roads, Rs. 33,238 from bazaars and slaughter-houses, Rs. 4,143 from conservancy and Rs. 1,237 from hack-cart licenses. Expenditure shows a corresponding increase, reflecting the continued improvements in the town, due largely, as the annual reports shew, to the zeal of the Civil Surgeons who, beginning from Colonel Kanta Prasad, I.M.S. (who held office from 1901 to 1906), have, as successive Vice-Presidents, devoted themselves to the care of the town. In 1920-21 Rs. 4,498 was spent on general administration, Rs. 6,288 on lighting, Rs 1,425 on water supply, Rs. 15,463 on conservancy and Rs. 1,857 on other sanitary requirements, Rs. 29,687 on hospital and dispensary, Rs. 5,873 on education, Rs. 8,235 on market and slaughter houses, Rs. 2,622 on arboriculture, the public garden and experimental cultivation, Rs. 15,083 on roads and culverts and Rs. 2,996 on Public Works Establishment. Rs. 7,783 of the expenditure on hospitals and

Rs. 3,278 of the expenditure on education was met by grants from Government. Municipal police had been abolished in 1905.

A noticeable point in the comparison of income and expenditure is that the whole expenditure on Public Works in the town is less than the amount raised by the toll on carts, which is purely a tax on cultivators and cartmen living outside the town, while the road most used by these carts is maintained by Provincial Funds. The incidence of taxation as given in the annual statement of accounts for the year 1920-21 is Rs. 2-13-4 per head of population, but in view of the above fact this figure conveys rather a false impression. The only direct taxation is that on houses and lands Rs. 8,733, which is less than Re. 1 per head.

The incidence of total income from all sources was Rs. 10-6-10 per head. The incidence of total expenditure does not appear, but was rather under Rs. 10 per head for the year.

Roads. The area of the town is 4·683 square miles, and Civil Station 1·25 square miles. The total mileage of metalled roads and lanes is considerable for a town like Shwebo, being ten miles and six furlongs, while approximately two miles of unmetalled roads are also maintained. Considering the poor quality of metal available, and the heavy cart traffic at some seasons, the roads are on the whole well maintained.

Conservancy The day conservancy staff is responsible for keeping the town clear of rubbish, which is disposed of by cart and throwing outside the town. Night soil is dealt with by the night conservancy staff, and is disposed of by trenching.

Street lighting. The streets are lighted by oil lamps. Lighting was in abeyance between 1892 and 1901 owing to lack of funds. The capital outlay involved was Rs. 2,500 and the annual expenditure on the upkeep of the hundred lamps about Rs, 3,800, a sum which increased later as more lamps were set up. There is no separate lighting tax.

Water supply. There is as yet no municipal water system, but wells are kept in repair by the municipality in various quarters of the town. The continually recurring difficulties caused by wells failing in the dry season have led to the preparation of various schemes. The pumping of water from the Môksogyôn branch of the Shwebo Canal temporarily resorted to in 1921 owing to unusual shortage has not been finally abandoned as a permanent method of supply, though, the water being bacteriologically unsafe, filters would be necessary, increasing the cost. The pumping of water from the wells into high level tanks has also been proposed.

Municipal garden. A gift of Rs. 2,500 from Babu Girdhari Lall in 1906 enabled a municipal garden of 15 acres to be started in the

triangle between the east moat and the railway, north of the Kyaukmyaung-Ye-u road. The Committee supplies the necessary funds for its upkeep, Government contributing Rs. 200 annually.

Apart from an isolated grant in 1892 towards Maung Paw's school, there was no expenditure on education until 1894 when a smaller regular grant was made to the S.P.G. Mission school. In 1918-19 the municipality began to pay a fixed proportion of its income towards education, Government making a grant amounting in that year to seven times the municipal contribution. The contribution at first one per cent of the Municipal income was raised to two per cent in 1919, and three per cent in 1920. **Education.**

The hospital and dispensary were taken over by the Municipality in 1893 and an annual grant was made by Government towards its upkeep. The Hospital is under the control of the Civil Surgeon subject to the control of a Committee for some purposes and of the Local Government, represented by the Inspector-General of Civil Hospitals for others. This committee was previously a sub-committee of the Municipality. Since 1923 a separate hospital committee has been formed, on which the Municipality has four representatives, and a separate Hospital Fund has been created to which the Municipality pay sixty per cent of the amount not contributed by Government, the District Council paying the remaining forty per cent. **Hospital.**

Ye u town, formerly the headquarters of the Ye-u District, and now the headquarters of the Ye-u subdivision of the Shwebo district, was first constituted a Municipality under the Upper Burma Municipal Regulation in February 1890. A Committee was formed with four official members and nine non-official members, the Deputy Commissioner of the district being *ex-officio* President. Appointments to the Committee were made by the Local Government. The number of houses in the town was then 494, with a population of 2,749. The minutes of the Committee's proceedings now extant only date from 1891, but the Municipality never had a very vigorous life. The town was poor and the income from bazaar and slaughter-house small. The bazaar was built in 1891 and added to in 1892 by means of a loan of Rs. 10,000 from Government and remains much as it was. The Civil Dispensary was taken over by the Municipality in 1893. **Ye-u Municipality, 1890-1896.**

The abolition of the Ye-u district in 1895 was followed by the abolition of the Municipality in 1896, the inhabitants being no longer willing to bear the extra expense involved in administration by a town committee.

Ye-u Notified Area, 1920

From 1896 to 1920 the affairs of Ye-u remained under the control of the Deputy Commissioner, but in April of the latter year by notification of the Local Government the town was declared a notified area under section 210 of the Burma Municipal Act. The area included within the boundaries was 317·09 acres.

The appointment of a Town Committee was delegated to the Commissioner, Sagaing Division, but an electoral scheme will be introduced shortly. The present committee consists of four *ex-officio* members and five non-official members, under the presidency of the Subdivisional Officer, Ye-u.

The taxes leviable under the new constitution were (*a*) 2 per cent. on rental value of buildings and lands, with a minimum of Re. 1 on each building, (*b*) Rs. 4 on each vehicle kept within the area, (*c*) annas 2 per diem on all bullock carts entering the area, (*d*) scavenging tax on buildings in the Civil Station Rs. 2, on others Re. 1 per month. The rate of this last tax was reduced in 1922 to Re. 1 per house in the Civil Station and annas 8 per house in the rest of the town, no collections having been made under the rate first notified owing to the inability of most of the inhabitants to pay such a high rate. Even so, about forty households moved out of the notified area in 1921-22 to avoid the increased burdens of municipal self-government. These removals have had the effect of bringing the population below the level at which it stood in 1890, but the great improvement in the general standard of living, the increase in trade due to better communications, and latterly, to the opening of the Ye-u irrigation canal, is reflected in the large increase in bazaar receipts, now six times greater than thirty years ago. Apart from the bazaar the main source of income is tolls on roads and ferries, consisting partly of dues levied on carts entering the town, and partly of a share of the Ye-u ferry receipts, of which the balance goes to the Shwebo district fund. The ferry lessee gets a large proportion of his receipts from a toll of annas 2 per cart levied on carts using the temporary bridge over the Mu put up in the dry season. For the nine months from July 1st 1920 to March 31st 1921 the income of the Town Fund, which was started without debts or opening balance was Rs. 22,504, and for the full twelve months of the succeeding year 1921-22, Rs. 30,051. Unburdened with debt, the Committee has been able to introduce street lighting and more than double the length of metalled roads in the town.

The staff maintained by the Town Committee is as follows :— 1 secretary and overseer, combined pay Rs. 110

to Rs. 130, 1 clerk Rs. 40 to Rs. 60, 1 peon Rs. 14, 1 conservancy inspector Rs. 30, 15 conservancy coolies Rs. 16, 1 sweeper Rs. 18. In the bazaar, 4 durwans at Rs. 15 are paid by the contractor to whom the bazaar is leased. The cattle pound is under the Town Committee, and the keeper receives Rs. 25 a month. No permanent public works establishment is maintained.

The street lighting is done by contract, 113 lamps being kept up at a cost of Rs. 3-8 per month per lamp.

The Hospital was until 1923 a state hospital maintained from Provincial funds. It is now controlled by a committee on which the Town Committee has two members. Since March 1921 the Town Committee has been the medium of control for vernacular education in the town, but the amount of its own funds spent under this head is very small, nearly the whole of the expenditure, amounting to Rs. 4,000, being met by grants from Government.

District Fund.

District Funds were established in all districts in Upper Burma in April 1888. Subject to certain restrictions this fund has been administered up to the end of 1922 by the Deputy Commissioner.

Income a Expenditu

The income of the District Fund was derived chiefly from the following sources, figures for 1920-21 being given in brackets in rupees in round numbers. Slaughter house licenses (35,000), Cattle pound fees and fines (5,000), Sale proceeds of unclaimed cattle (4,000), Bazaar rents (10,000), Lease of tolls at ferries (12,000). This was supplemented from Provincial funds by a contribution towards the maintenance charges of certain roads transferred from Provincial funds to the District fund, equivalent to 4·25 per cent of the gross revenue from land revenue proper, *thathameda*, fisheries and minerals (1,03,000), a contribution to meet charges in connection with the veterinary assistants employed in the district (7,000) and, since 1918, a contribution towards education (38,000). Miscellaneous items include motor-car and cycle driving license fees, debt account, etc.

The chief heads of expenditure were Local establishment, eight Veterinary Assistants, Sanitary Inspector and District Agriculturist, etc. (8,000), establishment and contingencies in connection with slaughter houses, cattle pounds, markets, bungalows and ferries (14,000), conservancy in rural areas (2,000), removal and diet of lepers and contribution towards Leper Asylum, etc. (1,000), education (38,000), roads in charge of Civil officers (1,000) and, finally, a contribution to the Public Works Department for upkeep of roads and other public works (2,21,000).

There were in 1921, 32 slaughter houses, 125 cattle pounds, 6 bazaars at Kin-u, Zigôn-Tantabin, Wetlet, Sheinmaga, Thitseingyi and Kyaukmyaung, 20 ferries and 17 dâk and District Bungalows and some 150 miles of road administered by the fund.

District Council and Circle Boards. Consequent on the entension of the Burma Rural Self-Government Act to the district in March 1922 a District Council and eight Circle Boards were formed. The District Council consists of 23 members elected from the Circle Boards. The Circle Boards, one per township, consist of 12 to 14 members, except in the case of Kyunhla which has seven. The members of the Circle Boards are elected to represent groups of village-tracts, the qualifications of electors being, for residents, the payment of land revenue, *thathameda* or other specified taxes, and, for non-residents, the payment of income-tax on property situated within the village-tract or the payment of land revenue for six successive years on at least 10 acres of land situated therein.

All roads, buildings and other works constructed and maintained from the District Fund were from this date vested in the District Council to whom the balance standing to the credit of the fund was handed over. No further taxes, tolls or fees have yet been levied. The income of the District Council is derived from the same sources as those specified for the District Fund. Its expenditure will be similar, while funds are available The first meeting of the Council was held on 18th December 1922 and the election officers, appointment of members to form a Joint School Board with the Municipal Committee, appointment of a Finance Committee, appointment of members for the Hospital Committees for Shwebo and Ye-u, and routine matters, have up to the present engaged its attention. A secretary and two clerks are at present employed by the Council. No staff has yet been employed by the Circle Boards.

CHAPTER XII.

EDUCATION.

Literacy. The literate population was in 1911, 241 and in 1921, 293 per mille. The literate population for all ages over five years was in 1921, 335 per mille. The standard of literacy, which compared moderately well with the rest of the central plain in 1911, is shown in 1921 to compare favourably with only six districts in Central Burma and the Delta, Toungoo, Thatôn, Pakôkku, Meiktila, Myingyan and Lower Chindwin. The district ranks about the same as Sagaing, Katha and Kyauksè.

The number of literate males per mille was 451 in 1891, 505 in 1901, 429 in 1911 and 573 in 1921. The decrease in 1911 was due to the more rigorous application of the test of ability to read and write, instructions being issued that no person should be entered as literate unless he was able to write a letter to a friend and read the answer to it, and persons unable to write, but able to read in a more or less perfunctory manner, and persons whose ability to write was limited to the signature of their own names, should be excluded. Among females in the district, the progress of education in that decade was more than sufficient to overcome the greater stringency of the test applied. The figures for the four census periods were 7, 19, 73 and 42. Figures for literacy for all ages over five years were, in 1921, males 656 per mille and females 49 per mille.

The number of literate persons per mille of the Buddhist population was, in 1921, 292, of the Hindu population born in Burma 151, and born outside Burma 378: of the Mahomedan population born in Burma 151, and born outside Burma 404: and of the Christian population 426. The number of Hindus and Mahomedans born outside Burma is small, but the figures of literacy are high compared with the provincial figures for the same classes. Literacy among the Buddhist population does not vary greatly in different parts of the district. Shwebo town, of course, leads. The total number of literates in English residing in the district in 1921 was 882 males and 163 females.

As in the rest of Burma education was found at the annexation to be in the hands of the Buddhist monks. All boys went to the *pôngyi-kyaung*, or monastery, for a long or short period and were taught to read and write and to repeat portions of the Buddhist scriptures by rote. It was to these monastic schools that Burma owed her comparatively high standard of literacy, and they were made the basis of the present system of education. In 1889 the British Government extended its education policy to Upper Burma, and an Inspector of Schools, assisted by Deputy Inspectors, was sent up to register all schools which were found suitable for aid under the grants-in-aid rules and were willing to accept the government curriculum. It is on record that Shwebo district in this year earned Rs. 1,000 in results grants. A large number of schools were registered in this manner, and, though the opposition of some leading Buddhist ecclesiastics in Mandalay to secular education had some effect in preventing registration, there were in 1896-97, 46 public schools, of which more than half were monastic and the remainder lay schools. As there were Education.

few, if any, trained teachers, itinerant teachers, about one per township were employed until 1910 to visit the schools in their charges and introduce the teaching of new subjects. The number of certificated teachers in 1894 was only six and in 1910 five. By 1915-16 the number had increased to 36, but this being still far from adequate a month's normal school to enable uncertificated teachers to qualify for primary and secondary grade teachership examinations was opened in 1917-18 at Shwebo.

Controlling agencies. In 1894-95 after the amalgamation of Shwebo and Ye-u districts there had been one Deputy Inspector of Schools in charge of the district, but, following a great increase in the number of schools receiving grants-in-aid, the district was in 1904 divided into two sub-circles, named A and B, each controlled by a Deputy Inspector. The A sub-circle included Shwebo town, and Shwebo, Sheinmaga (now Wetlet) Ye-u, Kin-u and Tantabin townships, and the B sub-circle, Kanbalu, Tazè, Tamadaw and Kyunhla townships. In 1907-08, work in A sub-circle becoming heavy, Kin-u township was transferred to the B sub-circle. In 1914-15 a Sub-Inspector was posted to Ye-u to assist in the A sub-circle, and, a few years later, a Sub-Inspector was similarly appointed to the B sub-circle. Thus at present there is a Deputy Inspector assisted by a Sub-Inspector in charge of each of the two sub-circles, working, since 1919, under the Inspector of schools, Sagaing Circle. In 1918, with the object of bringing the people into touch with the work of the Education Department, a Divisional School Board was formed at the headquarters of the Division at Sagaing with a District Advisory Board at Shwebo. The Commissioner and Deputy Commissioner were *ex-officio* presidents and the Deputy Inspectors *ex-officio* secretaries of the Advisory Board, which consisted of both official and non-official members. In 1922-23 the management of schools throughout the district was handed over to a local body known as the Joint School Board of which the Deputy Inspectors have been co-opted members, and the Divisional School Board and the District Advisory Board were dissolved. The Deputy Inspectors are no longer concerned with accounts, their work being mostly advisory. Their duty is to inspect and examine schools and report to the Inspector and the Board.

Expenditure. Figures for expenditure are given in the "B" Volume. It will be seen that expenditure has increased fairly steadily from Rs. 13,544 in 1901-02 to Rs. 60,646 in 1920-21. It was Rs. 78,294 in 1921-22. The exceptionally high expenditure in 1910-11, of Rs. 1,04,698 cannot be accounted

for, as records are not available. The sum of Rs. 78,294 expended in 1921-22 was met by contributions of Rs. 11,866 from Provincial funds, Rs. 34,757 from the District Fund and Rs. 11,411 from Municipal funds. The remainder was made up from fees, Rs. 11,005 and other sources Rs. 9,255.

Private Schools. Schools which are visited but not aided are known as "Private" schools, and these numbered 694, in 1901-02, with an average daily attendance of 6,747 boys and girls. As will be seen in the "B" Volume the number of schools has steadily risen to 1,122. The decrease in the number of pupils after 1911 has not been accounted for. The daily attendance has averaged over 6,000 during the last ten years.

Public Schools. The number of Public schools, that is to say, registered schools teaching the prescribed government courses and receiving equipment, building, salary and results grants, has in the same manner increased from 99, in 1901-02, to 270 in 1910-11; but in 1911-12 the number fell to 171 increasing again to 222 in 1917, and falling again to 210 in the following year since which it has risen by one or two. The cause of these fluctuations has been the withdrawal of recognition from inefficient schools, which usually continue their work as Private schools. The total number of all schools has shown a slight decrease in only one year 1918.

Daily attendance at the Middle schools has averaged about 1,100 boys and 400 to 500 girls during the last few years. At Primary schools just under 3,000 boys and over 1,000 girls attend daily.

Middle Schools. Of the 215 Public Schools in 1921, 181 were Primary and 34 Middle Schools. The latter include four very efficient Roman Catholic Mission schools, three for boys at Chantha, Mônhla, and Thamayo, and one for girls at Chantha. U Pyi Zon's School in Shwebo town leads the rest in both efficiency and attendance, nearly 300 pupils attending. A hand and eye training school has been attached to this school. Other middle schools are situated at Shwebo, Pôkkôn, Uyindaw, Chiba, and Kyaukmyaung, in Shwebo township; Wetlet, Sheinmaga, Sinba, Saingnaing, and Halingyi (girls) in Wetlet township; Kin-u, Mutha and Môndaw in Kin-u township; Kanbalu, Zigôn, Thayetkaung, Aingbaunggyaung in Kanbalu township; Tawbo in Kyunhla township; Ye-u and Ye-u-gôn in Ye-u township; Taungbyin, Tabayin, Mayagan, Letti, and Kyudaw in Tabayin township; and Tazè (2) Wayangè, Indaing, Kanbauk and Kaduma in Tazè township. The Town Fund vernacular school at Ye-u was formerly a government-aided school

managed by Maung Pan Yi. In 1906 it became a government vernacular middle school. Later it was known as the District Vernacular School, but since 1921 it has been known as the Town Fund Vernacular School.

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There are at present no High schools in the district. All Saints' S.P.G. Boys' School, Shwebo, taught, for a short period from 1916 onwards, up to the eighth standard, but the number of pupils was insufficient to warrant the opening of a tenth standard without which the school could not retain the status of a High school.

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hools.

The first school to be established in the district after the annexation was all Saints' S.P.G. School at Shwebo. The Reverend Dr. F. Sutton, M.D., arrived in 1887, and started a medical mission and mixed school the following year. He was assisted by his wife. In 1889 the Reverend H.M. Stockings came to assist, and, as Dr. and Mrs. Sutton had to return home, he took charge in the same year and has held charge ever since. At that time there were perhaps 30 children attending. A weaving school was also started, but this, together with the school buildings and the missioner's house, was burnt to the ground in 1899. School was for some time carried on in the new church which was then being built, and later the Executive Engineer's bungalow adjoining was acquired. During the last decade substantial school buildings of stone have been erected at a cost of Rs. 30,000, half of which sum was defrayed by an anonymous subscription. A hostel of stone is now being built to accommodate a hundred boys or more. A number of children have always been boarded, but accommodation has been unsatisfactory.

English was the chief subject of study from the first, and, except for a short period when the eighth standard was taught, the school has remained a middle school, teaching up to the seventh standard. After 1905 the school became a school for boys only. Attendance has increased slightly during the last decade, being at its highest, over 200, in 1920-21. The school has since then been affected to a certain extent by the opening of the National School.

In 1922-23 among the pupils were 86 Burmese Buddhists, 4 Chinese, 11 Mahomedans, 9 Hindus and 21 Christians. The teaching staff consists of a headmaster and seven masters. Football and other games are encouraged, and the boys do physical drill. They have more than once sent a contingent to display before the Advisory Board in the hope that drill may be extended and improved in other schools, which, however, are unfortunately hampered by lack of space. The school has to its credit many Extra Assistant Commissioners and Myoôks.

The S.P.G. Girls' School was established on a footing independent of the Boys' School, of which it had previously been a department, in February 1905. Miss Mahon was in charge until, in 1919, Miss Druit, who had joined her in 1908, took over. Up to May 1920 the headmistress was responsible for the teaching of a standard, but since that date the teaching has been in the hands of a staff of Burmese teachers who have in the main proved very competent. It has been difficult to obtain an adequate staff and almost impossible to secure fully certificated Anglo-Vernacular teachers. The school has been registered sometimes as a primary and sometimes as a middle school, but has never taught beyond the fifth standar[illegible] t the present time girls who wish to study beyond the fourth standard do so at the boys' school while, on the other hand, boys of the first and second standards attend the girls' school. In the early years of the school day scholars were hard to secure, and orphans in the Boarding School formed at times the majority on the rolls. This state of things has gradually altered. There was marked progress from 1915 to 1920, when the total numbers rose for a few weeks above 90. A hopeful sign is that, of the girls now attending, a large proportion are in the upper standards, whereas a few years ago a girl was almost invariably taken from school as soon as she could be useful in the house and rarely passed the third standard.

Roman Catholic Mission Schools.

There are Roman Catholic Mission Schools at the old Christian settlements of Chantha, Mônhla and Chaungyo and also among congregations formed since the annexation at Shwebo. There is one boys' school and one girls' school at Chantha. All are secondary schools.

American Baptist Mi sion Scho

An attempt was made by the American Baptist Mission to found a school at Kanbalu, but it was not successful and closed in 1912.

Mahomeda Schools an Chinese School.

There are three Mahomedan private schools in Shwebo town, the total attendance of which is 45 boys and 22 girls. There are also Mahomedan schools in Kanbalu township, two at Bugyi and one each at Wetto, Gyigôn and Thabutkôn. The total attendance of these is 188 boys and 48 girls. There is a small Chinese School in Shwebo town.

National Schools.

Two National schools were opened at Shwebo in 1921, one for boys and one for girls, and their attendance was reported to be 200 and 35 respectively. The girls' school failed after some five months through lack of school-mistresses. The boys' school was more successful, and drew away a certain number of pupils from the schools in the town. There were eleven masters, most of them being University

students who had passed the I.A. or 10th standard. The school has eleven forms and offered an Anglo Vernacular education up to the equivalent of the 10th standard, though there were few scholars in the higher forms. Owing to the difficulty of obtaining school masters the school declined, and in 1922 there were only 85 students, the number of forms being reduced to eight. Fees are lower than in the S.P.G. School. A large school building has been long in course of erection on a favourable site on the station road. The school has up to the present been controlled by a committee of representatives of the various Nationalist societies in the town and district.

lementary raining lass.

An elementary training class has been opened at Ye-u in order to train teachers for the elementary certificate, as the Primary Teachership examination has been abolished.

urvey chool.

A survey school was first opened in Shwebo in 1890. This was closed in 1901 and transferred to Mônywa as sufficient recruits were then available for the requirements of the district. On the opening of the canals, and the consequent increase of supplementary survey work, the Sagaing survey school was, in 1911, transferred to Shwebo. This school was abolished in July 1923 and a new system of recruiting adopted. In the early days difficulty was experienced in training the students, as they were for the most part of the cultivating class and had little previous education. Of late years, with the spread of education, the class of pupil has improved. Of the 240 pupils who have passed through the school during the last ten years 75 to 80 per cent. have passed the Surveying, Arithmetic and Revenue Law examinations, and 148 have joined the Land Records Department, 9 the Settlement, 11 the Irrigation and 19 the Forest and other departments.

CHAPTER XIII.

PUBLIC HEALTH.

In spite of its high death rate, the district is healthy and the only serious infectious diseases are cholera and plague. Malaria is common in the region of higher rainfall and heavy jungle in the north of the district, but in the south of the district it is not unduly prevalent. Black water fever is very rare. Cases of enteric fever and beri-beri are occasionally met with, but the diseases are not endemic. Leprosy is uncommon, though there are a few cases in several of the larger villages. The number of known lepers in 1921 was under 300. Eye diseases are common as in the rest of the dry zone.

The Civil Surgeon assists the Deputy Commissioner in the care of Public Health in the district, but the increasing burden of medical work at headquarters renders it difficult for him to give more than an occasional glance at conditions outside the towns.

Cholera.

The localities usually affected with cholera are those situated along the bank of the Irrawaddy, and the season in which the disease is most prevalent is immediately after the rains. Cholera seldom makes its appearance during the hot weather, although at that time water is very scarce in some areas. During the last ten years only once, in 1915 has there been an outbreak of any importance. The first village then affected was Sheinmaga on the Irrawaddy, the disease having been imported by boatmen from villages lower down the river. It spread to most of the villages on the riverside higher up. Altogether 206 deaths were reported, of which 32 were in Shwebo town. A second but less severe outbreak occurred in 1918. The disease was imported from Katha district into Bugyi village, Kanbalu Township, and was confined to a few villages on the Shwebo canal, in that neighbourhood. Sixty nine deaths were reported in that and the following year, only one of which was in Shwebo town. No deaths have been reported since.

Plague.

Plague reached the neighbouring district of Sagaing in 1906 and Shwebo in 1907. No further outbreak occurred until 1910. There were outbreaks in the two following years, but in 1912-13 the town was again free. In all these cases most of the deaths were in Shwebo town. In 1913-14 there were further deaths, but the next two years were again free. Since 1917-18 plague has reappeared yearly. During the four years 1918 to 1921, 178 deaths were reported in the town and 214 in the district, and, during the one year 1922, 147 deaths in the town and 43 in the district. The chief villages affected during this period were Seikkun, Wetlet, Kin-u and Tantabin. The disease is generally imported from Mandalay to one of the larger centres of population, Shwebo, Wetlet or Kin-u, and from these it usually spreads along the railway line as people commence to evacuate. Expensive preventative measures were carried out in the 1907-08 outbreak, but inoculation has been more relied upon recently. The numbers inoculated were 1,383 in 1918, and 154, 1620, 198 and 785 in the succeeding four years. Evacuation on account of plague is readily and voluntarily resorted to in the outlying villages.

Small-pox and Vaccination.

A certain amount of small-pox was reported during the annexation operations in the district, and during the succeeding years there were severe epidemics, but except for a

small epidemic in 1896 there have been only afew isolated cases since.

Vaccination was started in 1886 and in August of that year Mr. Burgess, the Commissioner of the Northern Division reported that the people took most readily to it. "Unfortunately the lymph first used has failed in every case; the result of later operations is not yet known."

[V]accinators. During 1887-88 the four itinerant vaccinators in Upper Burma visited Ye-u District, and in 1889 one vaccinator was appointed to each district. In 1895 after the amalgamation of the two districts there were six vaccinators in the district. The number has since been increased to one per township. Since 1916 the vaccinators have been supervised by a native superintendent of vaccination. A separate vaccinator is paid and controlled by Shwebo Municipality. In the district vaccination is not compulsory. The Vaccination Act for the compulsory vaccination of children has been in force in Shwebo Municipality since 1893, and in Ye-u Town, since 1st July 1922. The Amendment Act under which the authorities can require all unprotected persons to be vaccinated after due notice, has also been in force since 1922.

The people believe in vaccination but owing to its inconvenience are inclined to postpone the operation. Statistics of operations are given in Volume B. During the first decade after the annexation the numbers vaccinated and the percentage of successful operations increased rapidly year by year, but after 1900 there was a decrease. The yearly average number of operations has not since then varied largely, being about 13,000. The percentage successful has, however, again begun to increase and has risen from 85 per cent. to 90 per cent. and, in the last two years, when operations were 16,393 and 16,372, the percentage of successful operations was over 95.

[H]ospitals. In 1886 the Hospital at Shwebo consisted of two *zayats* connected together. It was described by the Commissioner as being very popular. "Out-patients flocked to it for all sorts of complaints." Patients received a small allowance for subsistence. In 1887 a hospital for Military Police was established in Shwebo in addition to the Civil Hospital and two hospitals, one for Military Police and one for Civil purposes, were established in Ye-u. The Burma Police were to be treated at the civil hospitals. A Military Surgeon was put in Medical charge in both towns in addition to his other duties. The Civil hospitals were to have eight beds for men and four for women, and were to be looked after by an Assistant Surgeon with a staff of one compounder, one sweeper and two Burmans to act as cooks and ward servants. A contingent allowance of Rs. 5 per mensem

was allowed in all four hospitals for extras and dieting of sick. A Subdivisional Civil Surgeoncy was established at Tantabin but was closed again in 1892, on the headquarters of the Subdivision being transferred to Kanbalu.

Shwebo Hospital

The present Shwebo hospital has accommodation for fifty-one persons in all. The main building, constructed in 1893 in place of the two *zayats*, is a wooden structure with wards upstairs for six males and six females and two small rooms for paying patients. Further accommodation is furnished in a female ward with beds for eight and quarters for the nurse, and a building presented in 1915 by Lieutenant-Colonel Kanta Prasad containing, in separate wards for surgical, medical and special cases, twenty beds. These two buildings are of brick nogging. An up-to-date operation theatre was built in 1914 by Rai Sahib Girdhari Lall, and a new out-door block, a brick building built by public subscription assisted by Government, was completed in 1921. The institution lacks only a maternity ward. The remaining buildings comprise a mat hut with a cement floor known as the Infectious ward, a *zayat* in which relatives of patients from the district may stay and quarters for the Sub-Assistant Surgeon and staff.

The staff under the Civil Surgeon consists of a Sub-Assistant Surgeon, one clerk, two compounders, one nurse, one results system midwife, four ward servants (three male and one female) and six other menials.

The management of the hospital was taken over by the Municipality in May 1893 in consideration of an adequate grant from Government. The hospital committee was a Municipal Sub committee. A separate hospital fund was established in May 1923 and this is managed by a hospital committee composed of the Deputy Commissioner and the Civil Surgeon as *ex-officio* members, four representatives from the Municipal Committee, three from the District Council and representatives of the general public, including two women. The proportion of the expenses of maintenance to be contributed by Provincial and Local Funds has been calculated on the basis of the average number of in-patients of the four classes Government servants, Civil and Military Police, residents in the municipality and residents in the district, treated during the last three years. The Local Government pays as its share the salaries of the Civil Surgeon and Medical subordinates and contributes Rs. 2,200 towards the fund. Sixty per cent. of the balance of hospital expenditure is met by the Municipality, and forty per cent. by the District Council. The total expenditure averages Rs. 18,000 per annum.

The yearly average attendance of in-patients, between 1890 and 1900, was 342 and out-patients 6,310. Attendance during the last three years was as follows :—

	In-patients.		Out-patients.	
	Total number.	Daily average.	Total number.	Daily average.
1920 ...	763	28	14,560	91
1921 ...	829	32	13,583	90
1922 ...	737	29	14,471	93

Operations :—

	In-door.		Out-door.	
	No. of operations.	Deaths.	No. of operations.	Deaths.
1920 ...	213	2	364	...
1921 ...	216	2	353	...
1922 ..	197	1	360	...

From May 1st 1923, the Military Police Hospital at Shwebo was combined with the Civil Hospital.

Ye-u Hospital. The Ye-u Civil Hospital, completed in 1893, has accommodation for 14 males and four females. The daily average attendance for 1922 was seven in-patients and 44 out-patients. The staff consists of one Sub-Assistant Surgeon, one compounder and two menials, which is considered insufficient as the hospital is popular. It was previously supported wholly by Government. It is now maintained by Government, the Town Fund, and the District Council and is controlled by a hospital committee consisting of the Subdivisional Officer and the Sub-Assistant Surgeon, as *ex-officio* members, two members from the Town Committee and two from the District Council.

Kanbalu Hospital. At Kanbalu to which the Subdivisional Headquarters were moved in 1891 from Tantabin there was a Railway dispensary staffed by the Railway Company and tendering medical assistance to both the Company's employees and to the general public. A separate Civil dispensary was opened

in 1913 in the vacated quarters of a Sub-Inspector of Police in the Police Lines. It was temporarily closed in March 1918 and was reopened in July 1919. As the population is increasing a Civil Hospital is to be opened, and for this purpose the Forest Bungalow has been purchased and will provide accommodation for four beds. Out-door attendance at the dispensary has averaged about 9,000 yearly and was at its highest in 1916 when it was 16,982. In door attendance in a *zayat* built near the dispensary by a Burman in 1915-16 for urgent cases, was, in 1916, 696 and averaged 200 in the next five years. The dispensary is maintained wholly by Government contribution.

Sayast. There are no travelling dispensaries in the district, nor are there any private medical practitioners practising in any of the towns. In the areas where the hospitals are not within easy reach of the people, the two classes of *Sayas*, *Beindaw* (Physician) and *Payawga* (Charmer) rule supreme, and live on the credulity of the people. Some of the *phongyis* make it their business to learn something of the indigenous drugs and charms, but they unlike the *sayas*, do not go about visiting and treating patients at their homes. The *phongyis* and *sayas* have each a reputation for curing some particular disease. There is, for instance, a *phongyi* in Shwebo, who is noted for curing snake-bite. There is a *saya* who cures " children's disease " (*Thungèna*). Another *phongyi* during epidemics of plague, offers tattoo as a means of protection. The tattoo consists of three little dots of faint red colour and is performed on the fore-arm. Amongst an ignorant, superstitious and credulous people a protection of this sort is more readily believed in than the anti-plague inoculation, as, when done by a *phongyi*, it carries some religious sanction. Some *sayas* make use of thermometers and even keep a small stock of useful Western drugs and medicines such as tincture of iodine, quinine, aspirin, etc. The *sayas* never do any operation except on a simple abscess or boil, and this, more often than not, results in septicæmia. They generally burn the surgical knife in the fire red-hot and then allow it to cool before operating.

Sanitation. Little is done for the protection of public health in rural areas. A Sanitary Inspector, whose duty it is to report on villages, slaughter-houses, markets, etc. found in an insanitary condition and to report epidemics, has been maintained from District funds since 1915. Otherwise, sanitation is in the hands of village headmen. Shwebo Municipality employs a conservancy inspector and a gang of 20 coolies, responsible for keeping the town clear of rubbish, which is disposed of by carting and throwing outside the town. Sixteen

sweepers and one *jemadar* are employed for night conservancy. Ye-u Town Committee similarly employs one conservancy inspector, 15 conservancy coolies and one sweeper.

Water supply. In Shwebo town water supply is a serious problem. Water for washing and street watering is obtained from the moat which is filled from the Mahananda tank. Drinking water is obtained from wells and from the Môksogyôn branch of the Shwebo canal which passes the southern extremity of the town. It is distributed by water carts and the cost to consumers who do not draw their own supply is high. In the dry season the well supply drops dangerously low. There are several schemes for a pipe supply under consideration, but they are slow in materialising. One scheme is to pump canal water into the town. As the canal carries a considerable quantity of silt in the rains this would require an expensive system of settling tanks. Another proposal is to draw the supply from artesian wells. One tube well was successfully sunk in 1920, but the water is somewhat saline. If the Mahananda tank were utilised, a gravitation supply might possibly be obtained, but the tank would require unsilting and strengthening of the bund to enable it to hold an adequate supply to last through the dry season, while its utility as an irrigation work would be impaired. There is also considerable risk of pollution

In the district the construction of the major canals has improved the water supply over wide areas. Tanks are filled periodically during the dry season with canal water, and villages which formerly had to cart their hot weather supply four or five miles now have it brought to their doors. In addition one of the results of irrigations has been to raise the water table throughout the canal area, so that the supply of water in existing wells has been improved. Outside the canal area villages situated along the Irrawaddy, the Mu and the streams in the north of the district have no difficulty. Elsewhere villages are usually situated on sandy soil, and the supply from wells though susceptible of improvement is ordinarily tolerably adequate. Black soils in which water supply is difficult are usually avoided as village sites The only area in which water supply is a really serious problem is in the south-west corner of the district adjoining the Lower Chindwin, and for many villages in this area the situation has now been improved by the construction of the Ye-u canal.

ital tatistics. Registration of births and deaths is now maintained throughout the whole district. Registration of deaths was introduced in 1898. Registration of births was introduced in Shwebo town in 1898 and in the district in all townships

except Kyunhla in 1907, and in Kyunhla in August 1923. Excluding Shwebo municipality and Ye-u town there are 12 centres of registration with a total of 626 registration circles. A register with counterfoil is maintained by all village headmen and collections are periodically made by police patrols.

It has been found that births are more often omitted than deaths. This is probably due to the fact that a birth is a matter of less publicity than a death and does not call for entertainment, display and special offerings. Owing to the ignorance of headmen classification of cases cannot be relied upon, old age, fever and infancy being the stated causes of the majority of deaths.

Statistics are given in Volume B. The ratio of births has increased from 36·26 per thousand of the census population in 1911, to 39·99 in 1921. The ratio of deaths on the other hand has decreased from 32·65 to 21·94, but 1921 seems to have been an exceptional year, the actual number of deaths being far below those in 1918, 1919 and 1920 and also below the earlier years of the decade. Curiously enough this low death rate coincides with the year of lowest rainfall and most unfavourable agricultural conditions experienced for thirty years. A comparison with the vital statistics of other districts for the decade 1911-20 shews that the death rate in Shwebo is the fourth highest of all districts for which vital statistics are maintained. It is exc eeded only by Rangoon, Mandalay and Kyauksè. The highcdeath rate in Kyauksè and Mandalay has sometimes been asoribed to irrigation. In Shwebo there is no adequate ground for throwing the blame on the canals. A large proportien of the land now irrigated was under rice long before th construction of the canals, and where waste land was brought under cultivation the jungle cleared was usually light. There was no high fever mortality on the introduction of irrigation such as was experienced in the Môn canal area. In the absence of separate statistics for irrigated and unirrigated tracts in this district there is no ground for believing that the death rate in canal areas is higher than outside. The inhabitants are certainly better fed and better housed than their neighbours in *mogaung* tracts. The real reason for the very high death rate is the high rate of infantile mortality that prevails. In 1923 the rate in Shwebo town was higher than in any other town in Burma. About 37 per cent. of the deaths recorded in the district are deaths of children under one year old, the majority of whom die during the first few months of their lives. Nearly half the total reported deaths are deaths of children under five years of age.

CHAPTER XIV.

MINOR ARTICLES.

Shwebo Town.

Shwebo Town is situated on the Mu Valley railway line about three hours run from Sagaing. It is connected with Kyaukmyaung on the Irrawaddy by a metalled road 17 miles long. There is a continuation of this road from Shwebo north-west to Ye-u, a distance of 24 miles, metalled for the first four miles adjoining Shwebo. Another road also metalled for the first five miles runs west to Tèbin on the Mu 12 miles off. The banks of the Shwebo canal and Môksogyôn branch provide a fair weather motor road to Wetlet and Ye-u, while the bund of the old Mu canal forms a tolerably good road to Kin-u.

The town lies within the two miles square outer mud wall and moat built by U Aungzeya. In the south-east corner of the area surrounded by the outer wall there are still traces of the inner brick wall which runs for 5,000 feet north and south and 3,000 feet east and west. The town, consisting of some 2,000 houses, lies mainly within the old inner walls with the Pyinze Quarter and railway station situated outside to the north. The Civil Lines lie east of the town between the east moat and the railway line. Cantonments, now almost deserted, are situated on high ground two or three miles to the north-east and are connected with the town by metalled roads. South of the Kyaukmyaung-Ye-u road the moat is dry, and between it and the walls are situated the Police Lines and Hospital. In the centre of the town are the Deputy Commissioner's office adjoining the bazaar, the new District and Sessions Court on the site of the old Public Works Department office, the office of the District Superintendent of Police, the Municipal and District Council offices, the Post and Telegraph office and the Jail. The Ye-u Canal office is in the Civil Lines and the Shwebo Canal office close at hand east of the railway. The Public Works Department (Roads and Buildings Branch) office and the office of the Special Survey Party find accommodation in buildings in Cantonments. There is a Circuit House and Irrigation Bungalow in the Civil Lines. The dåk bungalow is north-east of the railway station. In the town the majority of the houses have mat walls and corrugated iron or *wagat* roofs. There are however a considerable number of substantial wooden houses and a few brick houses. The large number of new houses of the better type that have been erected in recent years indicates that the town is prospering.

The population of the town at the census in 1921 was 10,605 persons, an increase of about 13 per cent, on the population of 1891. The 1891 population included troops (probably about 800). Even allowing for this the increase is not very large. The normal civil population is 9,384 persons 4,723 males and 4,661 females. About 80 per cent. of the population are Buddhists, 8 per cent. Hindus and 8 per cent. Mahomedans More than a quarter of the Indians are to be found in the Pyinze quarter. A number are gharrywallahs. Most of the remainder live near the bazaar, in Zedan road or in Minyat quarter. They are principally traders and shopkeepers. Chinamen number about twenty-five households.

There are several schools in the town, All Saint's Boys' school and a girl's school belonging to the S.P.G. mission, two middle schools, three Mahomedan private schools and a small Chinese school. Of the male Buddhist population 68 per cent is literate, of the female 24 per cent.

The history of the town appears in Chapter II. Before the rise of U Aungzeya it was merely an ordinary agricultural village. Captain Baker's description of the town in 1755 and Dr. Richardson's in 1837 are given in Chapter II. Apart from the fact that it was the capital of the kingdom in U Aungzeya's reign the town enjoyed few natural advantages. Its position near the Muhaung canal and Mahananda tank would give it some agricultural importance, but the area served by these works was very limited. The town did not lie adjacent to any main line of trade, and it is clear from Richardson's account that the place had declined considerably after U Aungzeya's death. The construction of the Mu Valley railway and of the Shwebo canal have completely altered conditions and have brought prosperity to the town, which is now the main exporting and distributing centre for the large area irrigated by the Shwebo canal.

Though nowadays known always as Shwebo, the town has had five different names applied to it:—

(i) *Môksobo.*—The name given to the village founded in the 13th century on land given to Hunter Nga Po in the manner described in Chapter II, and the name by which it was known up to the rise of U Aungzeya. U Aungzeya was born in the village, the site of which is where the Shwechettho pagoda stands.

(ii) *Kônbaung.*—The countryside was famous for its embankment dug for irrigation purposes in the 13th century and now known as the "old Mu". From this it became known as *Kônbaung pyi*, the country of the embankment, (*Kôn*-high ground and *baung*-to heap up, *Cf myaungbaung*,

kônbaung). The town afterwards acquired the name of *Kônbaung* also.

(iii) *Yatanatheinga*, "City of the precious Priesthood." The name with which Alaungpaya honoured the town when he laid it out and built the walls and moat in 1753.

(iv) *Yangyiaung*, a less common name given in commemoration of the repulse and eventual subjugation of the Talaings.

(v) Shwebo substituted for Môksobo in Tharrawaddy's reign probably to suppress the word *môkso*, a hunter, an occupation repugnant to the Buddhist religion.

The five names are perpetuated in a song peculiar to Shwebo called the *Kônbaung-bwè* sung to the accompaniment of two large drums more barbaric than musical. There are two drummers each with a large *bongyi* slung round his neck. These are beaten lightly to the time of the man who sings the words and clashes a pair of cymbals at the same time Meanwhile two girls dance a measure. Tune, music and dance are peculiar to Shwebo. The song recounts the feats of Alaungpaya and also tells of the Mahananda lake with its lotus flowers and feathered game.

Shwebo was supposed to contain *aung mye* endowing all those who walked upon it with power of victory. On this account Mindôn Min, lest others should attain power and rebel as he had done himself, made the land pagoda land, thus robbing it of its magic virtue. Further to remove temptation, he pulled down the old palace of Alaungpaya and distributed images of Buddha carved from its pillars in the neighbouring villages. One of these images still remains in Shwebo, and others no doubt exist.

Shwebo subdivision. The Shwebo subdivision which has its headquarters at Shwebo comprises the Shwebo, Kin-u and Wetlet townships. It is situated in the south-east of the district and is bounded on the east by the Irrawaddy, on the south by Sagaing district, on the west by the Mu river, and on the north by a line which follows the Ketlan *chaung* for part of its course, but elsewhere follows no prominent natural feature.

Shwebo township. Shwebo township is the central township of the Shwebo subdivision. It stretches from the Irrawaddy on the east to the Mu on the west. The northern and southern boundaries do not follow any prominent natural feature. The area of the township is 428 square miles. There are 82 village tracts in the township, and the population in 1921 was 63,104 persons as compared with 60,292 persons in 1911. The density is 147 persons to the square mile. The total area occupied for cultivation is 241 square miles. Agriculture is the principal occupation of the inhabitants and rice the chief crop, the whole of the western half of the township being irrigated by the Shwebo canal.

Chiba. Chiba is a large village of 400 houses in the Shwebo canal area situated three miles west of Shwebo on a metalled road. Agriculture is the chief occupation, but the weaving industry is also very important. The *pasos* woven are a mixture of silk and cotton from which possibly the name of the village is derived. A small rice mill has recently been erected outside the village.

Kyaukmyaung. Kyaukmyaung on the Irrawaddy is 17 miles distant from Shwebo by a metalled road. It contains 214 houses and in 1921 had a population of 1,031 persons. It is a town under the Upper Burma Land and Revenue Regulation. Trade is the principal occupation of the inhabitants, but is declining owing to the competition of villages on the railway. The three adjoining villages to the south Nwènyein, Shwegun and Shwedaik are famous for the manufacture of Pegu jars. There is a bazaar, telegraph office police-station and dâk bungalow. The village is a port of call for Irrawaddy Flotilla steamers.

Kyaywa. Kyaywa is a large agricultural village in the Shwebo canal area ten miles north-west of Shwebo, situated north of the road joining Nyaungbintha village and Myingatha railway station. Richardson in 1837 stated it was founded by General Maha Bandula, but nowadays like everything else its foundation is ascribed to Narapati Sithu.

Nyaungbintha. Nyaungbintha is an important agricultural village in the Shwebo canal area twelve miles north-west of Shwebo on the Shwebo-Ye-u road. It contains 370 houses and had a population of 1,625 persons in 1921. It has an Irrigation bungalow.

Palaing. A village of ancient origin eight miles south-west of Shwebo on the Shwebo, Myinthe road. Originally it owed its importance to the large tank north of the village which irrigated the paddy land to the south. It is probable that at one time water was led into it from the Mu river by an irrigation channel known as the Mingaung Myaung. The head of this channel is now three miles from the present course of the Mu River, but it is close to one of the former beds of the river. The tank is reported to have been built by Mingaung Min and at a much later date was repaired by Mindon Min. Owing to the introduction of canal irrigation it is no longer required. The bund has been cut, and the bed of the tank is now under cultivation. The village now has 264 houses, and the chief occupation of its inhabitants is rice cultivation. There is a small District bungalow near the village.

Seikkun. Seikkun is a large and wealthy village in the Shwebo canal area, seven miles west of Shwebo, with which it is

connected by a road that is metalled most of the way. Agriculture is the chief occupation, and it is an important centre of the canal area paddy trade. Two rice mills were established in the village in 1923. In addition, as at Chiba, the silk weaving industry is important. The population of the village in 1921 was 2,272 persons. An important pagoda festival is held here annually at the full moon of Tagu. There is an irrigation bungalow near the village.

ṡinin. A village of 274 houses situated in the alluvial belt along the Mu river. The population is almost entirely agricultural. With the assistance of canal irrigation heavy paddy crops are now obtained from the alluvial soil in the tract. Beans are also grown. This and adjoining villages are handicapped by the absence of communications with Shwebo.

ėbin. A village of 161 houses situated on the Mu river twelve miles west of Shwebo with which it is connected by a fairly good road, metalled for the first four miles. There is a ferry across the Mu during the rains. During the dry season a temporary bridge is erected annually. The cultivation of paddy and beans is the chief occupation. The village is liable to flooding when there is a big rise in the Mu river. There is a Public Works Department bungalow in the village.

alôn. An important agricultural village of 204 houses five miles north-west of Shwebo close to the Shwebo-Ye-u road. In Burmese times it was the headquarters of a *myingaung*.

n-u Township. Kin-u township is the northern township of Shwebo subdivision. From east to west it extends from the Irrawaddy to the Mu and is bounded on the north by Kanbalu township and on the south by Shwebo township. It is 309 square miles in extent and contains 79 village-tracts. Between 1911 and 1921 the population increased from 42,404 to 45,090 persons, and the density is now 146 persons to the square mile. The area occupied for cultivation is 2 4 square miles. The west of the township irrigated by the Shwebo canal, the Muhaung canal and various tanks is much more closely occupied than the higher land in the east. Paddy is by far the most important crop, though there are considerable areas of *ya* land under sesamum in the east.

The township was formerly known as the Chaukywa township because it included the Burmese jurisdiction of Thabuttaw Chaukywa.

in-u. Kin-u the headquarters of the township is a flourishing trade centre on the railway line, fifteen miles north of Shwebo. It is connected with Shwebo by an unmetalled road along the old Mu bund, and there is a metalled road 12 miles long between it and Ye-u, for which it has hitherto

been the railway station. The opening of the Alôn-Ye-u railway will probably deprive it of much of the Ye-u trade it has hitherto enjoyed. Over half the population are agriculturists but there is a considerable number of prosperous traders and shopkeepers engaged in exporting paddy and distributing the requirements of the surrounding agricultural villages. There are five rice mills in the place. Kin-u is a town under the Upper Burma Land and Revenue Regulation. It has the usual court-house and police station. The court house is new, the former building having been burned down in 1919. There is a post and telegraph office, a bazaar, a vernacular lay secondary school and a District bungalow. The population in 1921 was 2,862 persons.

Thawatti is a large agricultural village on the left bank of the Mu. The village has prospered since the introduction of irrigation by the Shwebo canal. Paddy is the chief crop, but a very large proportion of the villagers supplement their income by the cultivation of betel vine irrigated from wells. Thawatti.

Thetpe is an important village near the Mu and close to the Shwebo-Ye-u road. It is about five miles from Ye-u. Irrigated rice is the chief crop, but beans are also important. The alluvial soil in the tract is very productive. There is an Irrigation bungalow at Yônzu within the village tract. Thetpe.

Wetlet township, formerly known as Sheinmaga township when the headquarters was at Sheinmaga, is the southern township of the Shwebo Subdivision. It is bounded on the east by the Irrawaddy, on the south by Sagaing district on the west by the Mu and on the north by Shwebo township. The area of the township is 512 square miles, and it contains 88 village tracts. The population has increased from 54,075 to 63,636 persons between 1911 and 1921. The density is 124 persons to the square mile. The area occupied for cultivation is 348 square miles. The increase in the cultivated area has been rapid since the introduction of irrigation by the Shwebo canal. Irrigated rice is the chief crop but on unirrigated land in the south and east of the township sesamum, cotton and millet are important. Groundnut has made rapid headway in recent years in the red soil near Paukkan railway station and is extending northwards, while wheat is fairly important in the black soils. Beans are grown along the Mu and Irrawaddy and *matpè* and gram on the black paddy soils of the west of the township. Salt manufacture is an important industry at Halin and other villages. Wetlet township.

Wetlet. Wetlet the headquarters of the township is a thriving village on the railway line, 17 miles south of Shwebo, with which it is connected by a track along the Mŏksogyŏn branch canal. The population is almost entirely non-agricultural and is engaged in the distributing trade and in the purchase of the produce of the canal area. There are four rice mills in the village. Wetlet is a town for the purposes of the Upper Burma Land and Revenue Regulation. It has a court house, a police station, a bazaar, a post office, a vernacular lay school and a District bungalow. An Irrigation bungalow is in course of erection. Before the construction of the railway the village was a petty hamlet. Since the opening of the Shwebo canal it has grown rapidly and in 1921 had a population of 1,848 persons. Sixteen of the households are Chinese.

Halin. Halin is a group of hamlets, totalling in all about 500 houses, five miles east of Mŏksogyŏn railway station, with which it is connected by a Public Works Department road partly gravelled. There is a Public Works Department bungalow in the village which is about two miles north of Halin lake, noted for its wild fowl shooting.

The soil and sub-soil in the neighbourhood of the village are generally heavy clay and marshy. The upper surface is saturated with sodium chloride, and on this account Halin is one of the centres of the local salt industry. There are many springs in the low-lying marshy ground which separates the groups of houses that form the present village. Some of the springs are sweet and others salty. Some are cold and others hot. Most of them exist very much side by side and this according to the Burmans is one of the nine wonders for which the old city was famous. Major. V.P. O' Gorman Lalor examined the springs in 1910 and reported as follows:—"There are two varieties of mineral springs:—(1) muriated thermal springs, (2) muriated alkaline sulphated thermal springs. The waters of the first mentioned class resemble closely those of Wiesbaden and Baden Baden and will undoubtedly benefit cases similar to those successfully treated at these watering places. The general properties of thermal muriated waters are to encourage metabolism and thus improve general nutrition and to stimulate the gastro-intestinal mucosa and to aid elimination of poisonous products of disordered metabolism by the kidneys. Acting in one or all these ways the similar waters of Europe have proved of undoubted benefit in the following classes of disease dyscrasia:—chronic gastro-intestinal catarrh, chronic bronchial catarh, chronic rheumatism, sciatica and peripheral neuritis, hæmorrhoids, chronic uterine disorders, anæmia, tropical Cachexia, scrofula and rickets."

The temperatures of four of the springs were found to be 106° F, 112° F, 114° F, and 126° F. At present visitors from Katha and Mandalay districts occasionally avail themselves of the waters, the chief complaints for which they are used being rheumatism, chronic swellings, boils, itch, piles. and diseases connected with menstruation. The local people use the springs daily for warm baths.

In prehistoric times Halingyi was the capital of a Puy Kingdom. A stone inscription in the Pyu language has been found but still remains untranslated. Coins with the symbol of the rising sun on one side are occasionally picked up, and the bricks of the old walls still strew the ground.

After a conventional opening concerning the beginning of the world and giving many names of Halin one of them Hanthanagara (the City of the Geese), the Halin *thamaing* continues :—" Then the Great king, ruler of all the Earth, the All-Conquering, ordered that they should go forth and find a suitable place (*aung mye*) where his younger son might rule even as he ruled, for his eldest son would succeed him on the throne. And his younger son Garabaw with professors wise in every art, one versed in spells, one versed in the appearance of the soils, a *Bedinsaya* and a general, with carriages innumerable and elephants and horses and men and arms of every sort, set out from Benares to choose a desirable spot. And they chose a spot and built Hanthanagara there. And the place where they built Hanthanagara was unlike all other places. Grasses and creepers curled in strange ways. There was nought to fear from the beasts of the jungle. Trees and flowers were unusually full of beauty. The *thamin* could defeat the tiger in battle, and the hare the lion. The fox could overpower the elephant and the owl the crow In every way it was a place befitting a king, and the wise man pronounced it good, and the minister who could see one *yujana* into the earth pronounced it good. There was but one thing missing. Paddy and grass and wo od were there in plenty. But if all the four needs of man are not existing the days of a town will lnot be long. There was no water. To obtain water, Garabaw determined to dam the Irrawaddy, and on the new river boats could come and go, and in it the cattle could drink. So they set out for the Irrawaddy and set up a temporary palace there. They started digging at Shagwe. And when the bund was finished Garabaw (*let-kamaung kat*) slapped his arms as a boxer giving a challenge, and the *nats* were displeased and destroyed the bund.

Garabaw took it all very philosophically, and the glory of his rule was great and the splendor of the town unsurpassed. . . ., etc."

"And after Garabaw, ruled 798 kings and the eldest of the two sons of the last, Pyusawti, ruled and made Pyon Min his heir (*einshe*). And the Kingdom became great and glorious.

"In this king's reign there were nine wonders (*an-ko-ba*)

(1) The *shaw-byu* fibre tree throwing out branches to the north, the south, the east and the west gave forth *saga* flowers of the size of a lily, and the ones in the east were coloured white, and those in the south brown, and in the west dark red, and in the north golden.

(2) Brackish water tasted sweet and fresh.

(3) Perpetual water sprang from a *saga* tree and flowed like a stream.

(4) There were two large wells connected with a subterranean passage through which two *bilus* one golden and the other silver, swam to and fro.

(5) Two streams, one hot and one cold joining each other, flowed on together, the two volumes of water remaining unmixed.

(6) A bog which sucked in all that strode upon it, was dry when the rains fell and became muddy in the dry weather.

(7) A noted mango tree had nine arms, and each arm bore nine branches, and each branch nine twigs and each twig nine fruits and each fruit had nine tastes.

(8) Water and palm juice flowed in an unending stream from one palm tree.

(9) Mysterious music on the waters of the moat which surrounded the city could be heard by all both near and far.

Besides all this, when Pyu Min looked it rained gold and precious things, and when Pyon Min laughed jewels and silver dropped from his lips. One day the queen wanted to witness the smile of Pyon Min, and persuaded Pyu Min to order his brother to smile before her. But Pyon Min knowing that his smile would expose the queen to immoral temptation, which she would not be able to overcome, refused to obey. Pyu Min became very angry and ordered his brother to be put to death. No sooner was the order given than the sky became dark; a terrible storm raged; swords, spears and daggers fell from the heavens and destroyed all the inhabitants and the city was covered with ashes, Pyu Min also perished, and this great and glorious city came to an end.

"It was before the time of Gautama that Pyusawti thus ruled in Hanthanagara. But Pyon Min, with a hundred ministers (*amat ta ya*) escaped to Madaya, and, Hanthanagara no longer being a desirable spot, sought another place.

"Halin was one of the places where Dammathawka Min had the holy relics of the body of Buddha buried in the Shwe-ku-gyi Pagoda. Kyansittha Min also built pagodas, the Inbinhla Sudaungpye. After him when Alaung Sithu journeyed on his magic raft he founded more pagodas."

It is possible, though by no means certain, that Pyu Min mentioned in the Halin *Thamaing* is Pyusawti who ruled in Pagan from 168 to 243 A. D. There are various legends concerning Pyusawti, King of Pagan, which indicate that his origin is either unknown or not fit to be known and magic birth has had to be invented for him. One legend connects him with the ancient kings of Tagaung. According to another he was born of a *Nagama* (a female dragon, a term used elsewhere in reference to the aboriginal races) and the sun god, in an egg which floated down from Malè. He was taught the use of the bow by an old hermit, and, slaying many fabulous birds and beasts which were preying upon Pagan, was made heir to the throne by the reigning King and eventually succeeded him.

The fabulous beasts were evidently Pagan's surrounding enemies, which may have been subdued with followers skilled in the art of the bow. The mention of Malè indicates the direction from which Pyusawti came, and it may be hazarded that his being spoken of as born of an egg (*Udipwa*) indicates his sovereignty, for the Kings of China are throughout Burmese history known as *Udipwa*, and in the legend the other egg is supposed to have been carried away to China, suggesting some connection between Pyusawti and China. But the China of the Burmese is often only yunnan, Anawrata's journey to the *Udipwa* of China was only to the King of Yunnan. Thus, if Pyusawti's connection with Yunnan can be proved, it will be clear that the legend merely indicates that he, an *Udipwa*, or chief, sou of a *Nagama*, that is, of aboriginal race, descended from the region of Malè and, conquering the surrounding enemies assumed the throne of Pagan.

The link with Nanchao (Yunnan) is supplied by Pellio, who points out the strong resemblance in the nomenclature of the kings at Nanchao (Yunnan) and at Pagan from Pyusawti onwards. The last syllable of the father's name forms the first syllable of the son's in both cases. Thus in Nanchao, Sinolo, Locheng, Chenglop, etc., and in Pagan, Pyusawti, Timinyin, Yinminpaik, Paikthili, Thilikyaung Kyaungdurit.

"The identity is too absolute to be accidental, and indicates a common origin, probably comm unality of race.

Hladaw. Hladaw is an agricultural village close to the Hladaw branch of the Shwebo Canal twenty miles south of Shwebo. It is seven miles west of Wetlet with which it is connected by an unmetalled Public Works Department road. There is an Irrigation bungalow at Maukkyo on the canal bank three miles to the north The village was formerly headquarters of Hladaw Township with three circles, Hladaw, Kunitywa, and Yôntha. *Bo* Byin who was *Kayaingwun* of Shwebo at the annexation had been Hladaw *Bo*. The Hladaw-Pinzin tank connected with the Kadu by the *Pin-da-Yo* was an irrigation work of some importance before the introduction of canal irrigation. It was built by Narapati Sithu (13th centuary A. D.) and repaired by the Taingda *Mingyi* under the orders of King Thibaw. The repairs and raising of the embankment were due " not to any solicitude on the part of the King for the welfare of his people but to the fact that the astrologers had reported that, in order, to prolong his life, he should repair all pagodas and tanks, the last syllables of whose names began with the dental (t, d, or n), the dental being the symbol of Saturday, the day on which Thibaw was born."

ngut. A large agricultural village close to the eastern shore of the Kadu Lake. It is just outside the canal area. The chief crop is unirrigated rice, but wheat cultivation is making progress. A large proportion of the villagers also engage in salt manufacture.

einmaga. Sheinmaga is a large trading village with a population of 1,456 persons on the right bank of the Irrawaddy. The Mandalay-Thabeikkyin ferry steamer calls here. It has a bazaar, police-station, District bungalow and vernacular lay school. It is connected with Paukkan Railway station (eight miles) by a good unmetalled road. Up to 1911 it was the headquarters of the township. Since the construction of the railway trade has declined. Formerly with Kyaukmyaung it was a port for Shwebo, and Colonel Yule in 1855 estimated the number of house as 600. There are now 381. The village however still does a brisk trade in exporting salt, jaggery, and tea kettles, and its bazaar supplies the wants of the *kaing* cultivators on the Mandalay side of the river. The burning of the village by Nga Yaing the dacoit *bo* in the annexation days is described in Fielding Hall's " Soul of a People."

rebangôn Shwebangôn is a large agricultural village of 302 houses in the south-west of the Shwebo Canal area connected with Wetlet Railway station by an unmetalled district road. There is an Irrigation bungalow two miles from the village. The original founders of the village were Shans captured at

Zinmè and Kenghung known as *Yuns* and *Kaungkans*. They were settled in this area by Thalun Mindayagyi between 1629 and 1648 A.D. In 1910 on account of complicity in Maung Than's Myinmu rebellion it had punitive police quartered on it for a time.

Thakuttaw. Thakuttaw is an agricultural village in the Shwebo canal area near the railway line, two miles north of Wetlet. Salt manufacture is an important subsidiary industry.

Ywatha. Ywatha is a large agricultural village with 1,055 inhabitants (1921 census) situated in the south of the Shwebo canal area, 7 miles west of Wetlet on the Wetlet-Thamayo district road. There is a police station in the village.

Kanbalu subdivision. Kanbalu subdivision occupies the whole of the northern half of the district on both sides of Mu River. It includes the Kanbalu and Kyunhla townships.

Kanbalu township. Kanbalu township consists of the old Myedu township to which half of Malè township was added in 1902. It occupies the north-east corner of the district. On the north the boundary is Katha District, on the east the ridge of the Minwun Range down to the mouth of the Zin *chaung* and then the Irrawaddy, on the south Kin-u Township and on the west the Mu River, except in the north where a portion of Kyunhla Township lies east of the Mu between that river and the Tamyit *Chaung*. The population has increased from 51,895 in 1911 to 54,560 in 1921, and the density is now 36 persons to the square mile. There are some 5,000 Burma Moslems in the township, residing chiefly in Myedu, Sagôn, Bugyi, Wetto, Chinbyitkyin, Kyisu and Ngayanè. The township contains 125 village tracts and is 1,536 square miles in extent. Almost the whole of the north-east of the township is however covered by reserved forests, and of the total area, 703 square miles or less than half is under supplementary survey. The area occupied for cultivation is 243 square miles or less than a seventh of the whole. Only the south-west corner of the township is fully occupied. The rest of the area consists of broken forest country, and cultivation is restricted to the valleys. Rice is the main crop with the exception of a narrow strip along the Mu under *kaing* crops. Only a few hundred acres in the south-west are irrigated by the Shwebo Canal. There is a considerable area commanded by the old Mu Canal, but the canal does not function in this section. East of the canal there is irrigation from a number of tanks of some importance that are no longer maintained by Government. Work in connection with the forests is the chief non-agricultural occupation. These include the extraction of timber, bamboos and firewood. In recent years the extraction and conversion of

railway sleepers has been an important industry. In a number of villages the weaving of mats from split bamboos is the chief non-agricultural occupation.

Kanbalu. Kanbalu the headquarters of the subdivision and township is a railway centre of some importance. It is a town under the Upper Burma Land and Revenue Regulation. It exports paddy, but the timber trade is more important. In addition to a court-house it has a small military police post and police station. There is a railway and a civil dispensary and a temporary hospital. There is a post and telegraph office, an open bazaar, a vernacular lay school, and two rest houses, one belonging to the Railway, the other to the Forest Department. The town is the headquarters of a Forest Revenue Range. Its population has risen from 1,003 in 1901 to 2,040 in 1921.

Kyatthin. Kyatthin, a railway station 26 miles north of Kanbalu is another important centre of the timber and sleeper trade. A railway siding is under construction from this station to Yindaik on the Mu for the extraction of sleepers and firewood. In favourable years some 5,000 tons of paddy are exported. There is a District bungalow and a Forest bungalow in the village. The population is 8,041 persons.

Malè. Malè, formerly the headquarters of a township, is a trading village of 178 houses on the Irrawaddy. It is 30 miles from Zigôn railway station by an unmetalled district road. The Irrawaddy Flotilla Company's steamers usually stop here. Formerly the village did a considerble trade with the Shan States in pickled tea. The Shwemôktaw Pagoda is ascribed to Pyusawti, King of Pagan. The village figures in the early mythical history of Burma (see paragraph 134, Part II, Volume II, Gazetteer of Upper Burma and Shan States).

Myedu. Myedu is a walled village situated not far from the point where the old Mu Canal takes off from the Mu River. It contains 82 houses, and agriculture and forest work are the principal occupations of the inhabitants. There is a District bungalow in the village, which is about 12 miles west of Kanbalu by a village cart road. Out of a total population of 1,923 persons in the village tract, 1,137 are Mahomedans according to the 1921 census. These are mainly the descendants of the Pathis brought from Sandoway by Tabin Shwe Ti in 1564 A.D.

The village was formerly the headquarters of the Kanbalu Township before the railway was constructed. In Burmese times it was a place of some importance and was the headquarters of a *wun*. It played an important part in the wars with the Shan principalities of Mogaung and Mohnyin.

References to the Myedu *Yazawin* have been made in Chapter II. The following is a summary of its contents :—

" In the year 46, twenty years before Gautama was born, his grandfather Insana Min sent his minister, Ratanathincha, from the Kappilawut country, and he built the town of Myedu Walls and moat, nine *ins*, nine *kans*, nine *kus* and nine towns, Aungswa, Meiktila, Kundaing, Taungni, Tayôktin, Thabut, Ketthin, and Ngayandaing were all founded at the same time. The boundaries stretched from the Chindwin on the west to the Irrawaddy on the east. In the north they marched with the Shan State of Mogaung and in the south reached Kyauktaga. After this the Shan Hanbwa ruled over the place. Then Anawrata put Hanbwa to death. In 384 B. E. the Chinese entered the town. They were ejected and the town was repaired and enlarged. Alaung Sithu while touring the country on his magic raft stayed on the hill to the north-east of Myedu. He built many pagodas. In 662 B. E. in the time of the king ruling at Myinzaing, Usana was sent to repair the town. In 668 B. E. Sagaing Min Theinkaya Sawlun, when appointing troops in his northern dominions, stationed 24 horsemen in Myedu. In Mingyiswasawkè's reign, the town was repaired by the *Myosa*. In Nyaungyan Min's time *kalas* from Toungoo and Burmans also were given land in Myedu. Then Myedu was given to the Tabayin *Myosa*. In 999 B. E. in Yazamanisula Dayaga Mintaya's reign men from Zimmè were put in the town. In Thalwun Mintayagyi's time, shield bearers were given land (within the boundaries of the *nè* later called Pyinsala). In *thugyi* Yazapyanchi's time, Yuns and Kaunghans were given land in Nabet and Thapanzeik, and later Shans from Zimmè. In 959 B. E; 110 men from Toungoo were given land in Wetto *in* to work iron. In 1070 B. E. Arakanese *kalas* were given land. Every village that cut *thitya* or *ingyin* and smelted iron had to pay revenue in iron. . . . . . The descendants of Nga In Pyi who came over from Toungoo were *thanhmus* up till Alaungpaya's time and again to Sinpyushin's time."

Zigôn is a trading village on the railway line 26 miles north of Shwebo. The population at the 1921 census was 1594 persons of whom about one-third are agriculturists. It is a town under the Upper Burma land and Revenue Regulation and has a bazaar, police station and District bungalow. There are four rice mills near the railway station which draw their supplies mainly from the north of the Shwebo Canal area. District roads lead from the railway station to Malè on the Irrawaddy (30 miles) and Kabo near the Mu (6 miles). Zigôn.

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Kyunhla township.

Kyunhla township occupies the north-west corner of the district. It is bounded on the north by Katha district, the boundary being the Nanbayan *Chaung*. On the east the boundary is the Mu, except for a small area between the Swèlè and the Tamyit *Chaungs* that lies east of the Mu. On the south it marches with Tazè Township, the boundary being the Yabin *chaung*, on the west with the Upper Chindwin District. The area of the township is 988 square miles and the number of village tracts 37. The population has increased from 13,742 to 14,946 between 1911 and 1921. The density is the lowest in the district being only 15 persons per square mile. The bulk of the township is covered with forests reserved and unreserved, and villages are found mainly along the banks of the Mu and its tributaries the Maingwun and Pyaungthwè. Only 49 square miles, a twentieth of the total area of the township, are occupied for cultivation. Rice is the main crop. The rainfall (48 inches) is considerably higher than in any other township, and crops are comparatively secure, but the area is very malarious. Work in the forests provides the chief non-agricultural employment.

In Burmese times the whole of that portion of the township which lies west of the Mu formed part of the Gold Tract. The inhabitants were originally Shan- Kadus, but are now indistinguishable from Burmans.

Kyunhla.

Kyunhla, the headquarters of the township, is a small village with 471 inhabitants in 1921. The main village is known as Mingôn. It has a court-house, police-station and post office. There is a circuit room in the court-house building.

Ye-u subdivision.

Ye-u subdivision comprises Ye-u, Tazè and Tabayin Townships, and covers the whole of the western portion of the district west of the Mu and south of the Yabin *chaung*. From the annexation up to 1895 together with Kyunhla township it constituted a separate district known as Ye-u District.

Ye-u township.

Ye-u township is the central township of the Ye-u subdivision. It is bounded on the north by Tazè township and on the south by Tabayin township. From east to west it extends from the Mu to the Mu-Chindwin watershed. The township is 574 square miles in extent and contains 76 village tracts. The population has increased from 38,800 in 1911 to 42,997 in 1921. The density is 75 persons per square mile. This statement however conveys no clear idea of the distribution of population. The *indaing* country which covers the whole of the western half of the township s almost uninhabited, whereas the eastern portion is very

densely populated. Excluding the portion of the old Tamadaw Township that was added to it in 1922, the density at the 1921 census was 233 persons to the square mile. Agriculture is the principal occupation and rice the chief crop. The area occupied for cultivation is 159 square miles. The eastern portion of the township is irrigated by the Ye-u Canal. The central portion depends on fitful irrigation from streams that flow down from the high *indaing* country in the west of the township. In spite of the insecurity of crops land values are high owing to the pressure of population. In the centre of the township the palm sugar industry is important, and in all villages outside the canal tract a high proportion of the total income is ordinarily derived from non-agricultural sources.

Ye-u.

Ye-u, now the headquarters of a subdivision and township, was up to 1895 the headquarters of a district. From 1890 to 1896 it was a Municipality. In 1920 it was declared a Notified Area under the Burma Municipal Act. It is a town for the purposes of the Towns Act. The population in 1921 was 2,742 persons. The town is situated on the right bank of the Mu River. At present the nearest railway station is Kin-u, to which there is a metalled road 12 miles long. The Mu River is however unbridged, and communication is therefore occasionally difficult during floods. The terminus of the new Alôn-Ye-u branch will be at Ye-u-gôn about a mile north-west of Ye-u. Trade and money-lending are the principal occupations of the inhabitants. It is the chief distributing centre west of the Mu.

The town has a court-house, post and telegraph office, military police post, police station, hospital, bazaar, Anglo-vernacular middle school and town vernacular school. It also contains the offices of the two Irrigation Department Subdivisional Officers. There is a circuit room in the court-house and an Irrigation bungalow to the south of the town.

Magyidaw.

Magyidaw is a village with a population of 1,065, persons about a mile south of Ye-u with which it is connected by a metalled road. There is a considerable Indian element in the population, 85 Mahomedans and 53 Hindus, due to the place having been formerly a military police post. Rice is probably the main crop now that canal irrigation has been introduced, but the cultivation of onions irrigated from wells is still important.

Zeyawaddi.

Zeyawaddi is a large village of 223 houses in the unirrigated area in the west of the township.

Tabayin township.

Tabayin is the southern township of Ye-u subdivision.

Its area is 754 square miles, and it contains 91 village-tracts. The population has increased from 45,859 to 54,862 persons between 1911 and 1921. The density is only 89 persons to the square mile. As in the case of the other townships in the subdivision, the *indaing* country in the west is very sparsely populated. In addition the extensive *tanègyan* basin in the centre of the Ye u canal area is avoided as a site for villages. The occupied area of the township is 293 square miles. Rice is the chief crop, and two-thirds of the area irrigated by the Ye-u canal lie within the township. In the south-west *ya* crops, sesamum, cotton and millet are important, and along the Mu *Kaing* crops are grown. The central *tanègyan* basin produces *matpe* and *penauk* in addition to paddy. The palm sugar industry is one of the main sources of income in the area southwest of the canal.

Tabayin. Tabayin, the headquarters of the township, is situated on the Ye-u-Monywa road, nine miles south-west of Ye-u. It has a court house, post office, police station, irrigation bungalow and vernacular lay school. At the 1921 census it had a population of 713 persons. The inhabitants are agriculturists, shopkeepers and traders. There is also a somewhat unusual local industry, the fashioning of rosaries from cocoanut shells.

The village is of some antiquity, and its wall and moat, which include a very limited area, are still visible. Tabayin is said to have been founded in 555 B. E. by Narapati Sithu Locally the derivation of the name is given as *di* = ye = water, *pe* = seik = goat, *shin* = taw = jungle. What the language is no one can state definitely. Some say Kadu, others Talaing, others Chin.

In Burmese times the village was the headquarters of a district known as Tabayin Kothan, the epithet *Kothan* referring to the area it was thought to cover, *viz.*, nine million *pès*. A *pè* is 1·78 acres. The *wun* or governor usually resided there, though some of the later holders of the post resided at Ye-u. A list of *wuns* of Tabayin is given in the Upper Burma Gazetteer, Volume III, paragraph 406. The first recorded is Maha Bandula, the Burmese general, who was *wun* of Tabayin in Bagyidaw's reign. A garden to the north of the village is still known as Bandula's garden. He was born in Ngayabin in what is now the Lower Chindwin district. Dr. Richardson's account of the village in 1837 is given *verbatim* in Chapter II. He refers to the pacification of the district by Bandula after raids by dacoits from Hladaw. U Hman of Thitcho in Shwebo district was *wun* in Mindôn Min's reign and assisted the Padeinsa Mintha in

the rebellion of 1886. He was removed, and his place was taken by U Mo *Hnit-myo-wun* of Myedu and Tabayin. He was a kindly man, noted for his justice. He regarded the work of the Roman Catholic mission of Chantha favourably and frequently visited the priest in charge. After U Mo there were frequent changes in governors, and the area was much disturbed by dacoits who sheltered in the Payanpaga jungle and the Hnaw forest. In Burmese times the soldiers recruited in the Tabayin *wun*ship bore a high reputation for bravery. At the annexation the town was burned by dacoits, but in 1887 owing to the exertions of certain *pôngyis* it was rebuilt. In order to ensure protection for the new town the *pôngyis* induced the people to build a barrack at their own expense for the police.

West of the town there was formerly a large tank. This has now been drained, and the bed is cultivated with the assistance of canal irrigation.

Mayagan. Mayagan is a large agricultural village of 170 houses in the Ye-u canal area situated on the loop road that runs from Saingbyin to Ye-u It was formerly the headquarters of the township. Its large tank has now been drained, and most of the bed is under cultivation. There is a small district bungalow in the village. An important pagoda festival is held on the full moon of Tabodwè.

Tazè township. Tazè township is the northern township of Ye-u subdivision. From east to west it extends from the Mu to the Mu Chindwin watershed. The boundary in the north is the Yabin *chaung*, which separates it from Kyunhla township. In the south there is no clear natural feature separating the township from Ye-u. In 1922 the old Tamadaw township was divided between Ye-u and Tazè. The township is 613 square miles in extent and includes 62 village-tracts. Between 1911 and 1921 the population has increased from 45,859 to 52,089 persons, and the density is now 85 persons to the square mile. The area occupied for cultivation is 174 square miles. Unirrigated rice or rice grown with the assistance of unreliable irrigation from streams partly dammed by sand weirs is the principal crop. Beans are grown along the banks of the Mu and in the neighbourhood of the Sipadôn *chaung*.

Tazè. Tazè, the headquarters of the township, is a large village with a population of 2,261, persons who are almost all agriculturists. There are a few people who sell in their houses the everyday requirements of the villagers, and a few are engaged in pottery. The village is situated on the Kaduma Shanzeik-Zigôn road and is 13 miles from Zigôn railway station. It is also close to the road that leads north from Ye-u to Nwabetkyi and Kyunhla. It is 14 miles from the

proposed terminus of the Alon-Ye-u railway. The village has a court house, post office, police station, village lay school and district bungalow. There is an important irrigation tank close to the village.

vathitkyi.

Ywathitkyi Ywama is itself a village of only some 150 houses, but is the centre of a large number of small hamlets which, in addition to rice cultivation, are engaged in the palm sugar industry.

iptain iker's erview th U ungzeya at Øksobo, ptember '55.

The following is an extract from Captain George Baker's Journal. *

"Having received orders, from the Chief of Negrais to accompany the King of Buraghmahns, two Embassadors to their Prince, Lieut. John North and myself set out, from Negrais in company with them, the 17th July, as Embassadors from the Honourable Company, being provided by Henry Brooke, Esq., with a present for that Prince; consisting of four pieces of iron cannon, one a 12, the other three 9-pounders, 80 shots and 4 chests of powder, together with some few things of less value: having orders from the said Henry Brooke, Esq., for the concluding of a Treaty of Friendship and Alliance between the Prince and our Honourable Masters.

"Arriving at Persain, the 19th, and having prepared our boats, in the best manner we could, proceeded on our passage again the 21st in the afternoon.

* * * * *

"It was the 8th September before we arrived at the late seat of the Empire Ava, which is now governed under the king by his brother-in-law; on whom I waited and was kindly received; at least in such manner as is in this country, generally esteemed so; the 9th at sunrise we set out for Khounmeon (Kyaukmyaung) a town, on the bank of the river where the King always lands or embarks going or coming on any Expedition; and on the 12th, about 3 in the afternoon, arrived there when the governor immediately despatched notice thereof to the King. On the 13th I waited on this governor by whom too I was kindly received; he told me he had advised His Majesty of our arrival and expected an answer on that day. On the 15th the Buraghmahns Embassador returned to Khounmeon again, with orders to accompany us back to the King, and, on the 16th in the forenoon, set out and, after having laid by considerably in the way, reached the town about sunset and was lodged

* Baker's account is given in full in Dalrymple's Oriental Repertory. The above extract has been taken from a type written copy which evidently contained several clerical errors. Comparison with the original was not possible.

by the king's appointment in a house prepared for the purpose just without the middle east gate, when the Buraghmahns Embassador waited on the King, to acquaint him of our arrival. Soon after, his Secretary came by his order to take an inventory of our presents, which being done, he returned with it directly to him. On the 17th, in the morning, I was given to understand that he intended to admit us to a public audience in the evening, and for that purpose (having disposed of everything to the best advantage for the display of the grandure of his state) I set out at 4 o'clock accompanied by ten or twelve of his officers and four chests of powder, some shot, two muskets, two brass carbines, one guilt-looking glass, two bags of red earth, six bottles of lavender water, being carried, with the governor's letter on a piece of clean muslin, in procession before us, and, entering the gate, passed through two ranks of elephants and horses promiscuously disposed of and interspersed with crowds of people (perhaps the major part of the inhabitants) until we came to a street leading to the palace yard, where were disposed of in rows, about 200 pieces of brass patareros and cannon, and having advanced near the yard gate, where we could view the King on his throne, began our compliments,* from whence to the palace steps, we were conducted by about 20 musketeers, headed by a drum. In this part of the walk, were seated at little distances on each side, several bands of various sorts of Musick and women dancers unto the steps ascending the Presence Room, where I entered in the midst of a crowd of officers, in their Court dress, the

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* "Which were performed on the knees, bowing the head three times low down; this was repeated three separate times, from the place, where it was first begun, to the palace steps. It must be confessed it was an extraordinary ceremony, as I had it in my power to have refused, at least not voluntarily to have submitted to the performance of it, but what would have been the consequence? I conceive the preventing an amicable interview, breaking off the Treaty, and confirming them in the opinion they, either real, or pretendedly entertained, since our ships firing on them, of our being in combination, with the Peguers against them. But it may be objected perhaps that the Honourable Company's dignity is not to be prostituted after such manner, on any condition; I answer, the custom of this country is well known; that some such ceremony has been always paid, and they who would reform the manners of a jealous prince, or bigoted people need much force and eloquence; I was master of neither. Moreover, I was possessed of no instructions on the head; and I could not justify myself to those who had an authority to examine me, for interrupting that friendship and good understanding, which we might expect to ensue from this journey, on a punctilio, which in a little time, by prudent management, I believe, may in great measure be got over."

King's two eldest sons being seated on carpets, one on each side of the foot of his throne where their father sat in state. Having paid him my compliments, he looked at me for some time, and at length said: how does your king do? I answered he was well when we had the last accounts from Europe. How old is he? Seventy-two years. Is he at peace with his neighbouring princes? Yes, and has been since the last war with our old enemy the French, which is now about six years. Having paused some time, at length, says he: Your ships that were at Dagon with Mr. Whitehill, I treated with kindness, and supplied them with what they wanted, and at my leaving that place to come here to keep our fast, desiring him that, in case it should be required in my absence on an emergency, to assist my people; or at least not to join the Peguers, against them; which, though he promised to observe, yet was the first that fired on them; I answered: I was heartily grieved at his being guilty of so rash and imprudent an action; and that I was sure His Majesty could not be more offended at him than Mr. Brooke would be for it; however hoped that, on due examination, it would in the event appear clearly to His Majesty that, it was either the force of the Peguers, or the fraud and device of our inveterate enemies, the French, which had compelled or seduced him to it. But, says he, had not Mr. Brooke any hand in this, was it not by his counsel? I gave him all the assurances to the contrary, that I thought would be most likely to convince him, and concluded that head, with averring, that I was sure no other human affair could give him so great uneasiness, as the news of this would do. He then ordered the letter to be read, to which he gave a calm attention till coming to these words: 'as you will, by this means, obtain an alliance and friendship with so great a Power as the Honourable East India Company, who can send you such assistance as will support your Majesty's throne, against all future rebellions domestick feuds, and foreign enemies.' At which he affected a very hearty laugh, (and his officers in attendance like true Courtiers joined in the chorus) said: 'have I asked? or, do I want any assistance to reduce my enemies to subjection? let none conceive such an opinion. Have I not, in three years time, extended my conquest three months' journey every quarter without the help of cannon or muskets? Nay, I have with bludgeons only, opposed and defeated these Peguers, who destroyed the capital of this kingdom; and took the prince prisoner; and, a month hence, I intend to go, with a great force in person to Dagon, where I have an army now lying

when I will advance to the walls of Pegu; blocade, and starve them out of it, which is the last town I have now to take, to complete my conquest; and then I will go in quest of Bourno. Then the Secretary proceeding on to these words, These Gentlemen may be witnesses to Your Majesty's placing your Signet to the contract on your part, etc.,' he again affected the same mirth (and was too again joined by his courteous attendance) saying, What madman wrote that? (Alluding to the Buraghmah who translated the letter, for he thought, or pretended to think, that one of his own subjects should think in which he supposed the translator to agree with the writer of the original that he who had recovered most of all the ancient dominions should want assistance to take the last town, as he called it.) The letter being gone through, he says: Captain, see this sword, it is now three years since it has been constantly exercised in chastising my enemies; it is indeed almost blunt with use, but it should be continued to the same, till they are utterly disappeared; don't talk of assistance, I require none, the Peguers, I can wipe them as thus (Drawing the palm of one hand over the other).

"I told him I was convinced of his potency, but hoped at the same time our voluntary offer would not be taken in bad part. He answers: See these arms and this thigh (drawing the sleeves of his vesture over his shoulders, and tucking the lower part up to his crutch) and adds: amongst 1,000 you won't see my match. I myself can crush 100 such as the King of Pegu. I protest, and God knows the truth of my assertion, that State is a burthen to me. 'Tis a confinement which I endure only on account of the necessity there is for it, towards the support of government; I have carried my arms to the confines of China; the king of which country has sent me a rich present of curious things (several of which he showed me), on the other quarter, I have reduced to my subjection the major part of the kingdom of Cassay, whose heir I have taken captive, see there he sits behind you; I have also some of the princesses in my court, they sit yonder; (then says he to them) Come forth. On which they passed before us; I have upwards of 100 near relations, amongst the rest and own brother, there he sits (pointing to him) and 9 children, two of them men grown, there they are; they have behaved well in the late war, the third a youth, here he is, the rest are but young. To all which I made the most suitable, or what I conceived would be the most agreeable answers (for I thought this was the avenue to his heart) admiring the success of his arms, telling him it was the immediate hand of Providence;

and declared his present from China, rich and curious; hoping my Honourable Masters would have the opportunity of presenting to him some of the produce of Europe, in their kinds equal to, if not surpassing, them; when it should be known to them, what sorts would be most acceptable to His Majesty, and hoped that His Royal progeny would, to the end of all time, perpetuate the memory of their unparalleled predecessor. After some time he asked me where the other letter was, meaning the Articles, I answered him, Here. He asked me, in what language they were, I told him, English, he then desired me to get them translated into Buraghmah and bring them to him the next day; on which he gave the signal for our withdrawing, which we did accordingly, going through the same ceremony as I did at my entrance.

"The 18th. Translated the heads of the Articles into Buraghmah, in order to have presented them to the king but he being not disposed to receive them that day, desired they might be sent by Gregory (the Armenian Ambassador) the next; which was accordingly done, being the 19th, and causing them to be read to him, said, What! they want three places, and will give me in lieu thereof an annual curiosity; and pray what is this curiosity to be? Go ask the Captain. Gregory came accordingly, and desired to know what it was designed to be, or whether I could assure any particular thing. I told him the Honourable Company, had expressed themselves in that manner only because the King might have the opportunity of making known to them, what would in the produce of Europe, be most acceptable to him. Gregory returned immediately with this my answer and the King sent word again, by him in return, that muskets and guns were what he made choice of, could I assure his present should consist of that; I returned for answer, that he might depend it should.

"The same night, though late, he sent Gregory back again with this message, *viz.*, that as he intended to begin the siege of Pegu, some six weeks hence, he chose rather to have a good supply of arms now, than an annual present of them, and that he would grant the Negrais and Persain to the Honourable Company, with a place at Dagon, where he intended to build a town himself (for he was determined to destroy Syriam, and suffer no body to inhabit there) if I would assure him he should be immediately supplied with 1,000 muskets, and 20 pieces of cannon. Thus ended all that passed material on the 19th, and on the 20th in the morning, I returned for answer by Gregory again, that 1,000 muskets was a quantity that I could not assure, however,

that if His Majesty would please to sign these articles, I would warrant that on my return to Negrais he should be supplied on the spot with 75 muskets and six pieces of cannon, and that a vessel should be sent to the coast, to return again as soon as possible with 14 pieces of cannon, and 525 muskets more; that being the utmost I could assure; however, I would use all my interests and endeavours with Mr. Brooke, that the number of muskets should be made 1,000; and though I could not affirm it should be so, yet from the great respect I knew Mr. Brooke to have for His Majesty, and the strict attachment to the Buraghmah interest in general, I had great hopes, I should be able to prevail on him to grant the full of His Majesty's request.

"He then sent back word for us to wait on him on the morrow, *viz.*, 21st, and I went to the Palace Gate for that purpose, but he sent out an apology, and desired that our attendance might be postponed till the next day.

"On the 22nd accordingly, I waited on him, at about 4 o'clock in the afternoon, when he happened to be busy with his Court, about other business; and therefore sat near an hour before he accosted me, which was again with the story of the shipping; how ill they (our English) had requited his favours. I answered him in such manner as at length he confessed, he believed Mr. Whitehill not guilty, but Swaine he affirmed to be resolved in a scheme with Bourno. However, says he, you see my army repulsed them, notwithstanding their force and treachery, but how can we trust you again? However I am willing to try how far you will prove truly my friends, and therefore we will now live, as heretofore, in amity, and you may have a place as customary at Persain and Dagon (for we intend to destroy, Syriam) but says he, with what intention did you come to Negrais? and without staying for the answer, went on again with encomiums on himself and success; and ran on with a narrative [. . . .] to say any thing, but signifying my approbation of what he said; at length he concluded, with saying now we shall see how far you will be friends and I will deal accordingly with the Company, then I told him if he would please to grant their request, I would assure he would be supplied with the arms, etc. I had before warranted; on that condition he said: I have granted them Negrais, and a place at Persain and Dagon, but come again tomorrow morning.'

"The 23rd in the morning I was desired to defer my attendance till the evening, between 4 and 5 o'clock, then I accordingly waited on him, and having sat a little while he called the Secretary and dictated to him Mr. Brooke's

letter, which was in our hearing; but I, finding he tolerated the Honourable Company with liberty for factories at Persain and Dagon only, without any mention of Negrais, and all this without any form of security, I desired his Majesty that he would please to make a grant of that to them also, as ships of burthen could not be brought up to Persain to repair; and because that it was particularly useful as a harbour, which the Honourable Company often wanted to shelter their ships as it was at one season of the year dangerous lying on the coast.

"Why! you are there, are you not? but I thought you had wanted to come all to Persain. However I don't tell you not to stay there, but let me see the Company's generosity and then they shall see mine; we are yet but strangers, this is the first time you have ever seen my face, I don't yet well know your intention of staying there, for what instance have I had of your sincerity, I treated your ships at Dagon with singular kindness; and they proved traitorous to me after it; let me see how the Company will behave this time, let them show their generosity, and mine shall not be waiting, I don't care if they bring all Madras to Negrais if they behave kindly now; for this is the only time by which I shall judge of their friendship. Then he gave the signal to withdraw, and come again in the morning.

"The 24th in the morning I went to the Palace Gate, to have waited on him, but was told he desired I would come in the evening, I went in the evening accordingly but was told he was indisposed, and would have me come the next day.

"I went accordingly, *viz.*, the 25th in the afternoon, but he being (as I was told) greatly indisposed (his indisposition was excessive grief for a favourite concubine who then lay dangerously ill) I was desired to come to the Rounday the next day, where the Governor's letter should be delivered to me by the King's Council unless I had any particular desire to take my leave of His Majesty in person. I told them, I was entirely devoted to the King's pleasure, with respect to that; I then was given to understand the same night, that he would admit me to an audience the next morning.

"The 26th, I kept a person at the palace the whole day to know what it should be the King's pleasure to admit me but at night was told, as heretofore, that His Majesty's indisposition had so much increased, that he could not grant an audience, and therefore desired me to come again in the morning; hoping he might be better then, I went accordingly about 10 o'clock in the morning, on the 27th

to the Inner Rounday, from whence a messenger informed His Majesty of my coming, who returned for an answer in writing; Don't take it amiss Captain, that I could not give you an interview, my indisposition will not admit of it. (At this time his favourite lay on the point of death, and expired about two hours after. She was daughter to a petty prince, whose dominions lay about 15 days' journey to the northward of Momchabue, and whom the King had subdued; and taken this princess captive.) I have therefore sent by my first Minister the Company's letter, and ordered him to give you a horse, return again with despatch and meet me at Dagon, or in the way thither, then the Company shall not want they would have; I have the elephant's teeth, wax, etc., etc., ready for them. This being read, and interpreted to me, the Minister delivered me the King's letter, and ordered the horse to be sent to my house, I then answered the King's apology and said: I am far from thinking ill of His Majesty for not granting me an audience of leave, at such conjuncture; I am on the contrary heartily grieved for his indisposition, and hoped his recovery would be speedy; for which I should not cease to pray; then paying my compliments, took my leave and withdrew to my house, where I made ready for setting out the next morning.

"Sunday, 28th September, at 4 in the morning, set out for Khounmeon, where arrived at 10 in the same afternoon, and employed the residue of the day in preparing for our departure.

"The 29th, at 5 in the afternoon, left Khounmeon.

* * * *

"This is an exact and true account of our passsage to Momchabue, my transaction with the King there, in every respect (some repetitions respecting his success in the wars only excepted, of which he seemed to think he could hardly say enough) and return thence. As witness my hand."

George Baker.

List of Deputy Commissioners who have held charge of the Shwebo District since 1886.

Name.	Period of Incumbency.	
	From	To
Mr. H. L. Eales, C.S.	12th April 1886.	10th Oct. 1886.
Mr. B. K. S. McDermott ...	11th Oct. 1886.	13th June 1889.
Mr. W. T. Morison C.S. ...	14th June 1889.	8th April 1890.
Mr. C. A. Soppitt	9th April 1890.	April 1891.
Lt. F. H. Elliot, I.A.	April 1891	21st June 1891.
Mr. C. A. Soppitt	22nd June 1891.	15th March 1892.
Major W. F. H. Grey, I.A. ...	16th March 1892.	31st Aug. 1892.
Mr. G. W. Shaw, I.C.S.	1st Sep. 1892.	22nd Feb. 1894.
Mr. G. G. Collins	23rd Feb. 1894.	4th Sep. 1894.
Mr. E. P. Cloney (E.A.C.) ...	5th Sep. 1894.	26th Sep. 1894.
Captain J. J. Cronin, I.A. ...	27th Sep. 1894.	17th Dec. 1894.
Mr. G. G. Collins	18th Dec. 1894.	24th March 1897.
Mr. E. A. Moore, I.C.S.	25th March 1897.	1st July 1897.
Mr. G. G. Collins	2nd July 1897.	30th March 1898.
Mr. H. S. Hartnoll, I.C.S. ...	31st March 1898.	21st Feb. 1899.
Mr. G. F. S. Christie, I.C.S. ...	22nd Feb. 1899.	27th June 1899.
Mr. H. S. Hartnoll, I.C.S. ...	28th June 1899.	16th March 1900.
Captain O. J. Obbard, I.A. ...	17th March 1900.	27th May 1901.
Mr. W. F. Grahame, I.C.S. ...	28th May 1901.	13th June 1901.
Major H. A. Browning, I.A. ...	14th June 1901.	22nd Dec. 1902.
Mr. A. T. A. Shaw, I.C.S. ...	23rd Dec. 1902.	13th March 1905.
Mr. L. H. Saunders, I.C.S. ...	14th March 1905.	23rd March 1908.
Mr. W. V. Wallace	24th March 1908.	9th April 1914.

List of Deputy Commissioners who have held charge of the Shwebo District since 1886.

Name.	Period of Incumbency.	
	From	To
Mr. M. S. Collis, I.C.S.	10th April 1914.	12th April 1914.
Mr. A. G. Mosely, I.C.S. ...	13th April 1914.	29th April 1914.
Mr. B. W. Perkins, I.C.S. ...	30th April 1914.	4th Sep. 1914.
Mr. E. N. Bell, I.C.S.	5th Sep. 1914.	27th Nov. 1915.
Mr. J. B. Marshall, I.C.S. ...	28th Nov. 1915.	20th Dec. 1915.
Mr. H. L. Stevenson, I.C.S. ...	21st Dec. 1915.	9th Dec. 1916.
Mr. W. Street	10th Dec. 1916.	9th June. 1917.
Mr. R. B. Smart	10th June 1917.	17th March 1919.
U Po Than (1), A.T.M.	18th March 1919.	28th April 1919.
Mr. R. B. Smart	29th April 1919.	1st March 1920.
Mr. T. Couper, I.C.S.	2nd March 1920.	1st Dec. 1920.
Mr. J. J. Anderson, I.C.S. ...	2nd Dec. 1920.	4th Nov. 1921.
Major H. H. Batten, I.A. ...	5th Nov 1921.	20th Dec. 1921.
Mr. J. J. Anderson, I.C.S. ...	21st Dec 1921.	11th March 1923.
Mr. H. P. Hewett, I.C.S. ...	12th March 1923.	26th April 1923.
U Pein, K.S.M.	27th April 1923.	31st Aug. 1923.
Mr. W. T. Palmes, I.C.S. ...	1st Sep. 1923.	...

List of Deputy Commissioners who held charge of the Ye-u District from 1886 *to the abolition of the District in* 1895.

Name.	Period of Incumbency	
	From	To
Mr. W. N. Porter (U.C.S.) ...	2nd May 1886.	23rd Jan. 1888.
Mr. R. A. Lamb (Bomb. C.S.) ...	24th Jan. 1888.	17th Oct. 1888.
Mr. B. Houghton, I.C.S. ...	18th Oct. 1888.	27th Aug. 1889.
Mr. H. L Tilly, A. M. I. C. E. (U.C.S.), Assistant Engineer	28th Aug. 1889.	February 1891.
Mr. C. R. Stevenson (U.C.S.) ...	24th Feb. 1891.	26th March 1894.
Captain F. H. Elliot, I.A. ...	27th March 1894.	April 1895.

BIBLIOGRAPHY.

Phayre ... ... History of Burma.

Symes ... ... Embassy to Ava, 1759.

John Crawfurd ... ... Embassy to Ava, 1827.

Captain Henry Yule ... Mission to the Court of Ava, 1855.

Richardson ... ... Journal of a March from Ava to Kendat on the Kyen-dween River.

Bigandet ... ... History of the Burmese Mission.

G. Gratton Geary ... Burmah after the Conquest.

Dalrymple ... ... Eastern Repertory.

Crosthwaite ... ... The Pacification of Burma.

British Burma Gazetteer of 1880.

Gazetteer of Upper Burma and the Shan States.

History of the Third Burmese War; Periods III, IV, V and VI.

Report on the Settlement Operations in the Shwebo District, 1900-1906.

Report on the Revision Settlement of Shwebo District, 1918-1923.

Reports on the Census of Burma, 1891, 1911 and 1921.

Burma Gazettes from 1885 onwards.

Notes on the Mineral Resources of Upper Burma by Dr. Fritz Noetling.

Report on a visit to some salt workings in the Shwebo and Sagaing Districts, 1923.

List of Inscriptions found in Burma.

Secretariat Files Nos. 288, 11, 775, 474 and 484 of 1886, Foreign.

Upper Burma—relating to Shwebo and Ye-u Districts.

Archaeological Survey of India, Annual Report, 1903-04, containing Mr. Taw Sein Ko's "Ancient Relics found in Shwebo"

Annual Reports of Shwebo Municipality and Ye-u Town Committee.

Annual Provincial Reports on Administration, Police, Criminal Justice, Civil Justice, Registration, Salt, Excise, Village Administration, Sanitation, Public Health, Archaeology, etc.

Annual District Reports of various Departments for a few years up to 1922.

Hmannan Yazawin-daw-gyi.

Kônbaung Zet Maha Yazawin-daw-gyi.

The Halin *Thamaing*, the Myedu *Yazawin* and other local histories, and *sittans*.

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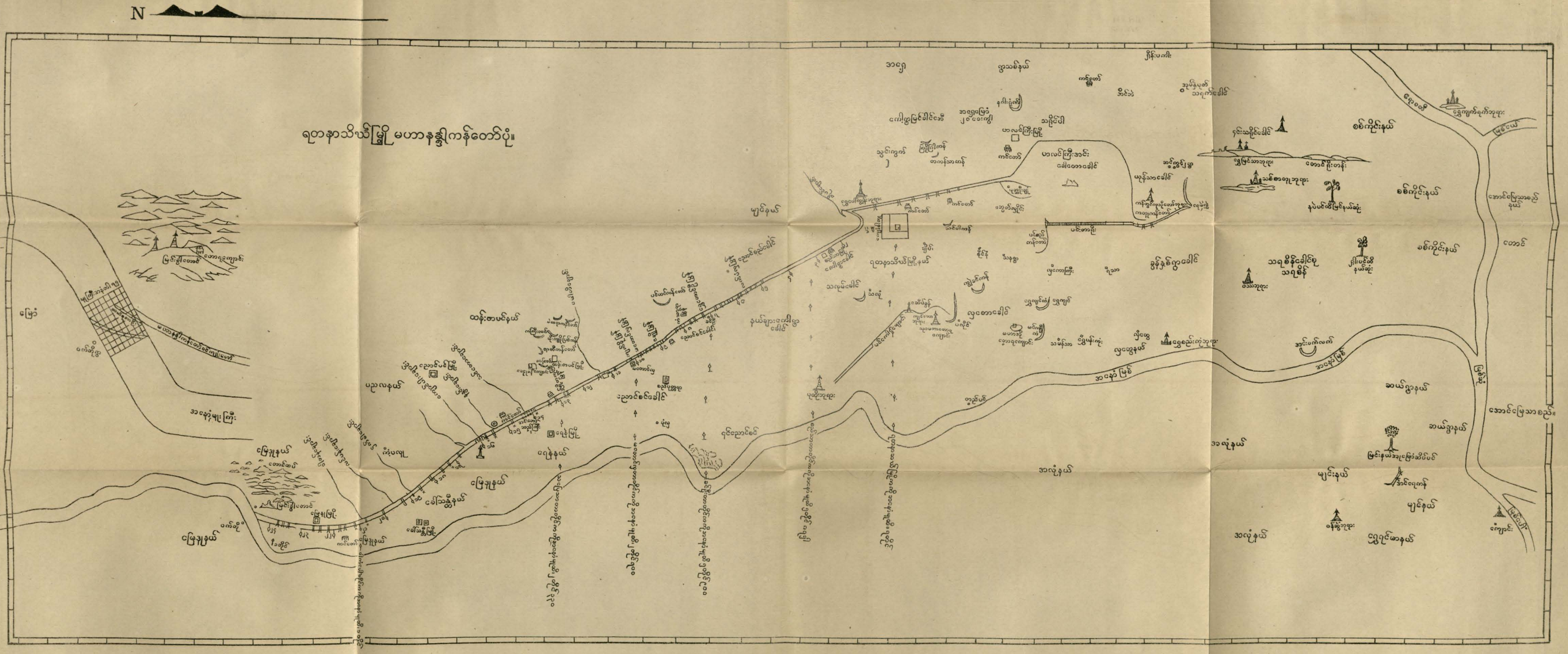
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